

**MFA Fleet Maintenance
Facility Project Section 106
Technical Report**

Moffett Federal Airfield,
Santa Clara County,
California




September 14, 2022

Sign-off Sheet

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Executive Summary

Stantec Consulting Services, Inc (Stantec) has prepared this technical report on behalf of Planetary Ventures, LLC (PV), which has entered into an Adaptive Reuse Lease with the National Aeronautics and Space Administration (NASA) for the NASA Ames Research Center (ARC) Eastside Airfield area at Moffett Federal Airfield (MFA). PV is proposing to develop a Fleet Maintenance Facility (FMF) in order to expand existing Google Bus services in this area of MFA. Specifically, the FMF project proposes to add four new maintenance tents (to the four existing tents on the site); remodel, reconfigure and expand the existing trailer complex on the site; add a transportable bus washing facility; reconfigure and expand site parking for buses and automobiles; add bus charging stations; and upgrade and expand existing site utilities. All work associated with the proposed FMF project is referred to as the “Undertaking.”

As the lead federal agency, NASA is responsible for compliance with Section 106 of the National Historic Preservation Act of 1966 (NHPA), which requires federal agencies to consider effects of all activities on historic properties. This technical report addresses the requirements of Section 106 of the NHPA, per 36 CFR Section 800, to assess the potential of adverse effects on historic properties. It includes a description of the Undertaking, the establishment of an appropriate Area of Potential Effects (APE), the identification of all historic properties within the APE, and an analysis of potential adverse effects, including cumulative effects, based upon the established Criteria of Adverse Effects as specified in the Section 106 regulations.

The APE includes the majority of the Eastside Airfield area of MFA, as well as the boundaries of the expanded Naval Air Station (NAS) Sunnyvale Historic District which is eligible for listing on the National Register of Historic Places (NRHP), and adjacent blocks in Sunnyvale to the east along Enterprise Avenue, including the Lockheed Martin Missile and Space Division (LMSD) campus. The APE is bounded by the levees along San Francisco Bay to the north, U.S. Highway 101 to the south, and adjacent areas to the airfield to the west. The area with the potential for direct physical alterations is referred to as the project footprint. The vertical APE will vary throughout the project footprint with a maximum depth of 50 feet below grade at the proposed facilities and 2-8 feet below grade at other locations of direct physical alterations.

The APE for the current Undertaking is the same as the APE for the Eastside Airfield Improvements Project (EAIP), which is a separate future undertaking that PV has proposed for NASA approval at the same location as the current Undertaking. The EAIP proposes to develop a private hangar complex, office building upgrades and associated site upgrades, in addition to construction of a permanent bus maintenance facility. The current Undertaking is an interim and reduced-scope version of one of the elements of the future EAIP (the bus maintenance facility), and it proposes new tents

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and trailers that are similar to the existing structures that already exist on the Eastside Airfield.

Note that neither project depends on the other. The current Undertaking will serve a useful function at the Eastside Airfield regardless of whether the EAIP is developed or not, and implementing the current Undertaking is not a prerequisite for, and would not necessitate, the development of all or any part of the EAIP. In addition, the EAIP is the subject of its own distinct review and approval process, including its own design review by NASA, its own review by NASA under the National Environmental Policy Act, and its own consultation process under Section 106. A Memorandum of Agreement (MOA) has been developed for the EAIP pursuant to Section 106 of the NHPA in order to address the project-level and cumulative effects on historic properties that are associated with that future project. In addition, a separate MOA has been developed for the proposed demolition of Hangar 3 at the Eastside Airfield, a project that is under review as a separate undertaking to address the hangar's structural instability and the unsafe condition this poses.

This report addresses the project-level and cumulative effects associated with the current Undertaking (the FMF project). This report concludes that the Undertaking qualifies for a Finding of No Adverse Effect. The effects on historic properties resulting from the Undertaking are minimal. The new tents and structures would be similar to the existing tents and structures on the site, would not result in any physical alteration of any historic property, would not result in any change in use of the site as compared to pre-existing conditions, and would not adversely affect the spatial or visual relationship among the contributing structures to the NAS Sunnyvale Historic District. Installation of utilities for the Undertaking would result in some disturbance to the surface of the aircraft parking apron (MF1002, a contributor to the Historic District), but the disturbance would be minimal, and following completion of the installation the areas of disturbance would be restored to match the existing, pre-project conditions. Further, the new parking for the Undertaking would add painted striping on a portion of MF1002, but this will not affect the historic character of the apron and the painted striping could easily be removed to allow for the revision of the apron to its pre-existing condition. Given that the effects from the Undertaking on historic properties would be minimal, and that any cumulative effects resulting from other undertakings proposed for the East Airfield (namely, the EAIP and the Hangar 3 demolition) will be resolved through the MOAs for those separate undertakings, a Finding of No Adverse Effect for this Undertaking is appropriate and warranted as further shown below.

Research and surveys identified the NAS Sunnyvale Historic District and the Alviso Salt Pond within the APE. No additional resources were identified as requiring further evaluation for NRHP eligibility. Due to the highly sensitive nature of the facility and the ongoing programs, a full survey and evaluation of the LMSD Campus for potential

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NRHP eligibility was not conducted; for the purposes of this study, it will be considered a historic property in assessing potential adverse effects.

Historic properties that could potentially be affected by the Undertaking include the following: the NAS Sunnyvale Historic District, specifically its contributors Hangar 1; Hangar 2; Hangar 3;¹ Building 55 (Heat Plant located between Hangars 2 and 3); Building 69 (former Inert Ammunitions Storage Building);² MF1002 (aircraft parking aprons on the east and west sides of the airfield); Building 158 (Flight Operations Building & Tower on west side of airfield); Buildings 70–74, 143, and 147 (High Explosive Ammunition Magazines) and the Naval Storage Depot (a landscape feature of the district on the east side of the airfield that consists of the open and undeveloped space surrounding the magazines and enclosed by the security perimeter fencing); and various airfield features, including the runways (MF1000 and MF1001), the parallel connecting taxiways (MF1016), and the Ordnance Handling Pad (Building 442). Additionally, the Alviso Salt Pond Historic Landscape and the LMSD campus would be indirectly affected. The remaining historic properties in the APE are not anticipated to be indirectly affected by the undertaking. Table ES-1 lists the historic properties in the APE and anticipated project effects on each historic property. Based on this study, as noted above, Stantec recommends a finding of no adverse effect to historic properties for this Undertaking.

Table ES-1. Summary of Historic Properties Affected

Bldg. #	Bldg. Name	Effects
01	Hangar 1	No Adverse Effect
02	Gymnasium/ Balloon Hangar	No Effect
05	Water Tower	No Effect
10	Heat Plant	No Effect
15	Security Station/ Fire Station and Laundry	No Effect
16	Public Works/ Locomotive Crane Shed	No Effect
17	Administration/ Admirals Building	No Effect
17a	Memorial Anchor	No Effect

¹ As noted above, Hangar 3 is proposed for demolition as a separate undertaking to resolve the unsafe condition posed by hangar's structural instability.

² The EAIP, described above, proposes to demolish Building 69 as part of its development of a permanent bus maintenance facility.

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Bldg. #	Bldg. Name	Effects
18	Unmanned Aerial Vehicle Research Building/ Aerological Center	No Effect
19	Industry Partners Building/ Bachelor Enlisted Quarters	No Effect
20	Bachelor Officer Quarters	No Effect
21	Garages/ Bachelor Officers Garage	No Effect
22	Garages/ Bachelor Officers Garage	No Effect
23	Carnegie Mellon University/ Dispensary	No Effect
24	Carnegie Mellon University Storage/ Ambulance Garage	No Effect
25	Admin. Building/ Recreation Building	No Effect
26	Gate House	No Effect
32	North Floodlight Tower	No Adverse Effect
33	South Floodlight Tower	No Adverse Effect
40	Flagpole & Grounds	No Effect
46	Hangar 2	No Adverse Effect
47	Hangar 3	No Adverse Effect ³
55	Heat Plant	No Effect
69	Inert Ammunition Storage	No Adverse Effect ⁴
70	Fuse & Detonator Magazine	No Adverse Effect

³ As noted above, Hangar 3 is proposed for demolition as a separate undertaking to resolve the unsafe condition posed by hangar's structural instability.

⁴ As noted above, the EAIP proposes to demolish Building 69 as part of its development of a permanent bus maintenance facility.

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Bldg. #	Bldg. Name	Effects
71, 72, 73, 74	High Explosive Magazines	No Adverse Effect
105	Airfield Lighting Vault	No Effect
106	Aircraft Compass Calibration Pad	No Adverse Effect
137, 138, 139, 140	Aircraft Fuel Storage Tanks	N/A
141	Tank Truck Filling Rack	N/A
143, 147	High Explosive Magazines	No Adverse Effect
158	Flight Operations Building & Tower	No Adverse Effect
329	Ultra-High Frequency/ Very High Frequency Receiver Building	No Effect
442	Ordnance Handling Pad	No Adverse Effect
454	Ultra-High Frequency/ Very High Frequency Transmission Building	No Effect
511	Weapons Station	N/A
684	Ground Maintenance Storage	N/A
686	Parachute Repair Building	N/A
934	Moffett Field Golf Course Clubhouse	N/A
A1-I1	Housing & Garages	No Effect
MF1000	Runway 32L/ 14R	No Adverse Effect
MF1001	Instrument Runway 14L/ 32R	No Adverse Effect

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Bldg. #	Bldg. Name	Effects
MF1002	Aircraft Parking Aprons	No Adverse Effect
MF1003	High-Speed Aircraft Fueling Pits	N/A
MF1016	Parallel & Connecting Taxiways	No Adverse Effect
N/A	Moffett Field Golf Course	N/A
N/A	Naval Storage Depot	No Adverse Effect
N/A	Alviso Salt Pond Historic Landscape	No Adverse Effect
N/A	LMSD Campus	No Adverse Effect

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Abbreviations

AOA	Airport Operation Area
APE	Area of Potential Effects
CAANG	California Air National Guard
CFR	Code of Federal Regulations
DPR	California Department of Parks & Recreation
DFSP	Defense Fuel Support Point
DLA	U.S. Defense Logistics Agency
EAIP	Eastside Airfield Improvements Project
FAA	Federal Aviation Administration
FMF	Fleet Maintenance Facility
ICRMP	Integrated Cultural Resources Management Plan
kV	Kilovolt
LMSD	Lockheed Martin Space & Missile Division
MFA	Moffett Federal Airfield
MOA	Memorandum of Agreement
NASA	National Aeronautics and Space Administration

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NAS	Naval Air Station
NASA ARC	NASA Ames Research Center
NHP	National Historic Preservation Act
NRHP	National Register of Historic Places
OHP	California Office of Historic Preservation
PG&E	Pacific Gas and Electric
POV	Privately-Owned Vehicle
PV	Planetary Ventures
SF	Square feet
SHPO	California State Historic Preservation Officer
SOI Qualifications	Secretary of the Interior's Professional Qualification Standards

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1.0 Introduction

Stantec has prepared this report on behalf of PV to evaluate the effects to historic properties resulting from the proposed FMF project that constitutes the Undertaking. Based on the criteria set forth in the Section 106 regulations, this report finds that the Undertaking qualifies for a Finding of No Adverse Effect. The Undertaking itself would cause only limited and minor physical alterations to a small portion of one contributing resource (MF1002, aircraft parking apron) to the NAS Sunnyvale Historic District. Further, the cumulative effects on historic properties at the Eastside Airfield resulting from the separate undertakings proposed to occur in this area (the EAIP and the Hangar 3 demolition) would be resolved through the separate MOAs developed for these two distinct undertakings. These other undertakings are not part of the FMF project, do not create any need for the FMF project, and would not be caused or necessitated by the FMF project. The grounds supporting a Finding of No Adverse Effect for this Undertaking are described in detail below.

This report was prepared by architectural historian Rebecca Riggs, MA, with review by senior archaeologist Erin Sherlock, MA. Ms. Riggs meets the Secretary of the Interior's Professional Qualification Standards (SOI Qualifications) for architectural history and history, and Mrs. Sherlock meets the SOI Qualifications for archaeology.

2.0 Description of the Undertaking

2.1 Undertaking Location

The Undertaking is located at Moffett Field, California, on the Eastside Airfield portion of the property. The Undertaking involves development of new facilities and associated infrastructure, including a Fleet Maintenance Facility (see Appendix A, Preliminary Site Plan). All elements of the Undertaking are located on the Eastside Airfield portion of MFA with the main runways and taxiways to the west, the Moffett Field Golf Course to the north, and the NASA ARC property boundary to the west (**Figure 2**). The facilities are largely centered along the Macon, Zook, and East Patrol Roads that extend north-south through the Eastside Airfield portion of MFA (**Figure 1**).

All buildings, elements, and improvements are located within the expanded boundaries of the NAS Sunnyvale Historic District, which is determined eligible for listing on the NRHP.

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2.2 Design Approach

At this time, designs for the proposed Undertaking are largely conceptual, but there is sufficient information available to make an assessment of whether the Undertaking would cause an adverse effect to any historic properties. While the specific details of the project designs are likely to evolve as the design process proceeds to completion, general design and performance criteria for the facilities have been established through the visioning, programming, and conceptual phases (see Appendix A, Preliminary Site Layout).

Specifically, the designs will focus on the following criteria and conditions:⁵

- Design new construction within the setting that is compatible but differentiated from the historic buildings.
- Consider the spatial and aesthetic relationship between the new buildings and the surrounding historic district, its contributors, significant view corridors, overall setting;
- Design buildings that exhibit scale and proportions that are consistent with the setting of the district, while also respecting the visual hierarchy of the space and the most prominent contributing structures therein;
- Employ massing in new designs that is consistent with the character of the district, while also respecting the spatial organization and visual characteristics and corridors through appropriate siting, setbacks, and solid-to-void ratios;
- Use a material palette that is compatible with the established character of the NAS Sunnyvale Historic District, particularly in relation to the contributing properties located on the eastside of the airfield;
- Employ features and forms, such as roof lines, fenestration patterns, façade articulation, and detailing that reflects upon the historic character of the historic district, while also being differentiated as new construction.

2.3 Fleet Maintenance Facility

The Undertaking involves expanding and altering the existing Google Bus services located on the eastern periphery of MFA through several new structures and one new building. The main element of the Undertaking is the FMF, which will be centrally located in the existing bus surface parking lot (see Appendix A, Preliminary Site Layout). Additional components of the Undertaking include installation of a transportable bus washing system as well as parking and utility upgrades as described further below

⁵ These criteria and conditions were derived from National Park Service Technical Preservation Services, *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating & Reconstructing Historic Buildings*, revised by Anne E. Grimmer (Washington D.C.: Department of the Interior, National Park Service, 2017).

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2.3.1 Maintenance Tents

The site currently houses four maintenance tents and office trailers that were installed in 2018. NASA consulted with the SHPO on this prior separate undertaking in 2017 and the California State Historic Preservation Officer (SHPO) provided concurrence on NASA's finding of no adverse effect on December 12, 2017 (OHP reference: NASA_2016_0531_001; see Section 5.2.1.6 below). The Undertaking will add four new maintenance tents near the existing bus surface parking lot, west of Macon Road and the existing Moffett Golf Course. The new tents will be installed in a rectangular layout that will be approximately 5,000 square feet (SF; see Appendix A, Preliminary Site Layout). The tents will be separated to avoid fire sprinkler triggers and they shall meet the necessary code requirements to allow for heavy maintenance. There will be minimal fixed equipment associated with the new tents, and the functional design for the new tents will be the same as the design for the existing maintenance tents at the Google Bus services area on the site (see **Photograph 1**). As part of the current Undertaking, the existing tents and office trailers may be retrofitted for seismic load and utilities connections.

The new tents will be surrounded by surface bus parking, as well as an expanded trailer complex and employee automobile parking (see descriptions below in **Section 2.3.3** and **Section 2.3.4**). Limited landscaping with a simple plant palette and site furnishings will likely be located in the vicinity of the main entrances.



- Notes**
1. Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet
 2. Data Sources:
 3. Background: USGS The National Map: National

- Undertaking Area / Project Footprint
- Expanded NAS Sunnyvale Historic District

0 2,100 4,200 Feet
(At original document size of 8.5x11)
1:48,000



Project Location
Moffett Federal Airfield
Santa Clara County, CA.

Prepared by KM on 2022-05-09
TR by RR on 2022-05-10
IR by SP on 2022-05-11

Project
MFA Fleet Maintenance Facility Project
Section 106 Technical Report

Figure No.

1

Title

Undertaking Location

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Photograph 1: Existing maintenance tents on the Eastside Airfield at MFA.

2.3.2 Bus Washing Facility

The bus washing facility will be a simple, prefabricated portable structure, likely skid mounted units with ramps (see Appendix A, Preliminary Site Layout). The building will be portable, aside from utility connections. All infrastructure associated with the building will be skid mounted or similar where feasible, so it is transportable.

2.3.3 Trailer Complex

The existing trailer complex will be remodeled and reconfigured, with more trailers added to the complex (as shown on Appendix A, Preliminary Site Layout). When feasible, trailers will be reused, and existing trailers left from previous projects will be relocated to the site (see **Photograph 2**). The updated trailer complex will include an approximately 20-30 trailers to include: men's locker room, showers, and restrooms; women's locker room, showers, and restrooms; bus operator workspace; rest areas; and trailers for lounge and break areas. The complex will also include at least four 40-

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foot Conex containers for parts storage and a raised deck to connect the trailers, with a shade structure and barbecue area with picnic tables.



Photograph 2: Existing trailers on the Eastside Airfield at MFA.

2.3.4 Bus Parking Lots

The existing bus parking lot will largely be spot repaired and reconfigured. Along the eastern portion, the existing pavement surface will be evaluated to assess if spot repairs and an overlay will be sufficient to refresh the surface and extend the lifespan, whereas the western portion of the bus parking, which is defined by the gridded paved surface of the former aircraft parking apron, will be retained, and utilized in its existing condition (see Appendix A, Preliminary Site Layout). For efficiency and safety purposes, bus operations will exit the facility using the roundabout instead of the existing concrete driveway, to minimize bus traffic in front of the golf course. One of the existing concrete driveways will be left in place and used as a secondary emergency access only, while the other will be converted to become the primary driveway used for the privately-owned vehicle (POV) parking lot adjacent to the new trailer complex. New bus service lanes will be completed to provide necessary access to those features and some of the

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current diagonal bus parking will be left as is, to continue to utilize the five existing bus chargers.

New automobile parking for bus employees will be moved to the paved south end of the proposed trailer complex (see Appendix A, Preliminary Site Layout). At this location, it is also planned to spot repair the existing pavement and use an overlay if necessary to refresh the surface and extend the lifespan of the surface. There are surface variations across the existing bus parking lot and on the eastern side of MF1002, where there are curb stops and aircraft tie downs. These will be filled in with grout.

2.4 Site Upgrades

2.4.1 Utilities

The utility infrastructure required to support the proposed facilities is available at the perimeter of the site. Where feasible, the proposed facilities will use the existing infrastructure; however, where lines are beyond their usable design-life, new utility alignments will be installed and existing utilities will be weather capped, replaced, or extended as necessary, in coordination with NASA. Most of the proposed electrical conduits will be between the maintenance tents and the trailer complex, with the exception being the addition of a 30 kVA transformer and electrical panel southwest of the bus washing building. Existing aboveground utility connections at the facility may also be undergrounded. The vertical extent of most of the ground disturbance will likely be less than 5 feet. New electrical lines under Macon Road to the substation will be at least 12 feet deep, while other potential utility connections will be roughly six to seven feet deep. Final depth of vertical disturbance may be greater depending on the final design (see Appendix A, Preliminary Site Layout).

To support the expanded bus parking lots, up to 30 additional bus charging stations will be installed and will utilize existing utility infrastructure. In addition, solar powered sight lighting will be installed around the project area.

2.4.2 Water

There are existing water pipes that are adjacent to Hangar 3, on the east side of the hangar and extend under the area of the proposed bus washing building. There are also existing water pipes below the area of the proposed maintenance tents and trailer complex. The proposed facilities will use the existing infrastructure; however, will include the proposed additions of new water connections and new water pipes that will connect to the existing infrastructure and provide branch lines to the proposed maintenance tents and trailer complex (see Appendix A, Preliminary Site Layout).

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2.4.3 Sewer

A new sanitary sewer line will connect to the existing 6-inch sewer line south of the proposed maintenance tents and trailer complex. The FMF will connect to the existing sewer lines to the south that will eventually connect to the existing sewer lines in Macon Road. The proposed sanitary sewer lines will utilize the existing manhole connections where possible (see Appendix A, Preliminary Site Layout).

2.4.4 Automobile and Pedestrian Access

In addition to the updated driveways and bus access roads, passenger automobile access and pedestrian access around the project area will be updated. New crosswalks will be installed and provide ADA accessible paths of travel from parking areas and the public way to the trailer complex site.

A new access road was recently approved by NASA for the project and the alignment will be up against the California Air National Guard (CAANG) fence/property to minimize the amount of road that encroaches into the existing gravel area (which is burrowing owl habitat). A new 6-foot-tall chain link fence will be installed to fence off the burrowing owl habitat from the road. This road will serve as the primary access point to Hangar 2 and will also include a pedestrian path of travel from the public way to Hangar 2. A new landside vehicular pathway will be created with a minimum of 11-foot lanes to provide an accessible path of travel to Hangar 2 and will include an accessible path of travel from Macon/Zook Road that will connect with the existing Hangar 2 accessible path of travel.

[REDACTED]

[REDACTED]

[REDACTED]

3.0 Background

Originally part of a Mexican land grant known as Rancho Posolmi, the land that is now NASA ARC has been in continuous use since 1844. Use of the land as agricultural fields for cattle grazing continued until the US Navy expressed interest in developing the land as an airfield. They were able to secure ownership of the land and established NAS Sunnyvale on August 2, 1931, having purchased it from a local civic group that organized the sale for \$1. Planned as an airfield for the Navy's dirigible rigid airship program, Hangar 1 and the campus around it were completed in 1933. The original NAS Sunnyvale was composed of Spanish Colonial Revival style buildings that were sited on a City Beautiful plan. The Navy used the facilities until they terminated their dirigible program in 1935 and transferred the airfield to the US Army Air Corps, who enlarged the runways and used the site as their West Coast training headquarters until 1942. During this time, a portion of the property was also used by the National Advisory Committee for Aeronautics (NACA), the precursor agency to NASA, who built the Ames Aeronautical Laboratory in 1939, including hangars and wind tunnels for research and testing.

Following the bombing of Pearl Harbor, the Navy took the facility back and renamed it US NAS Moffett Field. During the war they used it as the base for airships that patrolled the Pacific Coast and as a training center for airship pilots and also constructed Hangars 2 and 3 in 1943. During World War II, they expanded Moffett Field, purchasing 225 acres of land east of the airfield and enlarging the runways again. They continued enhancing the airfield in the post-war era, elongating the runways for newer, larger aircraft. With the onset of the Korean War in 1950, Moffett Field was used to train jet pilots and as the home base for Navy fighter jets and the facilities at the airfield were expanded again, with new buildings constructed around the perimeter of the property and both runways extended. By 1962, operations at Moffett Field were switched from jet to antisubmarine warfare, focusing on experimental antisubmarine aircraft, namely the P-3 Orion. The P-3 Orion Anti-Submarine mission would continue to operate at the airfield throughout the remainder of the Cold War-era. The mission primarily used the existing structures and buildings, specifically the former dirigible hangars, although several new training and support buildings were constructed during the Cold War period.

Use of Moffett for training operations continued until 1994 when it was closed to military operations and the property was transferred in its entirety to NASA (formerly NACA) for use as an experimental test site. Moffett Field's primary purpose turned to advancing airborne science and technology, including space travel. After the full transfer of the

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field to NASA, a portion of it including hangars and munitions storage areas was utilized by the CAANG 129th Rescue Wing.⁶

4.0 Area of Potential Effects

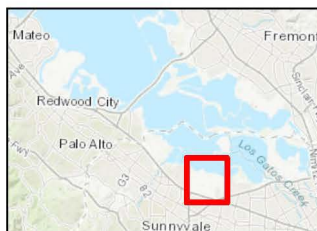
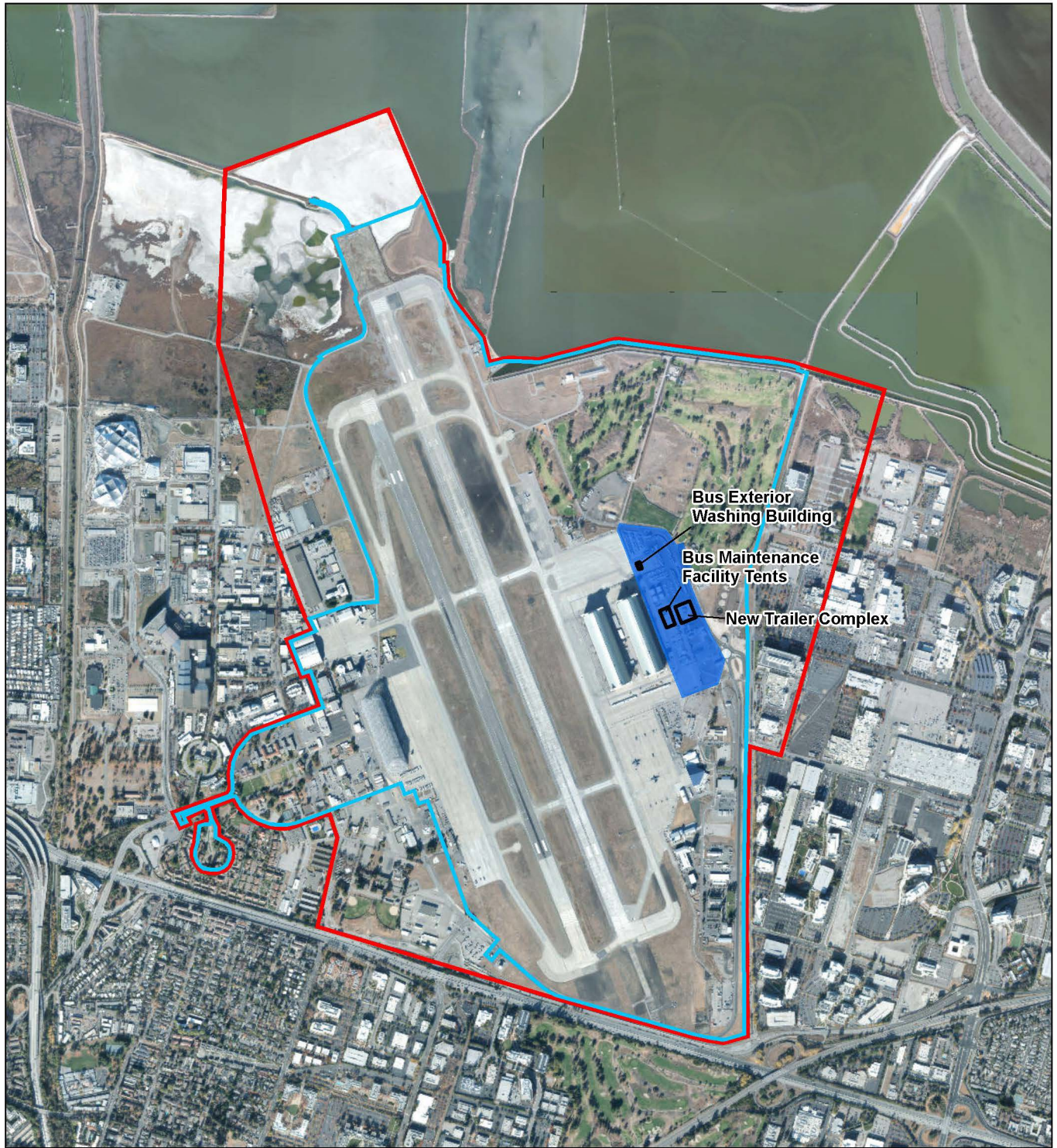
The APE is located within the expanded NAS Sunnyvale Historic District on the northeast side of the airfield (**Figure 2**). For the current Undertaking, the APE boundaries include the majority of the Eastside Airfield area of MFA, as well as the boundaries of the expanded NAS Sunnyvale Historic District.

The area with the potential for direct physical alterations, referred to as the project footprint, is primarily defined by the Undertaking area where work is occurring, specifically at the proposed location of the FMF. The project footprint will have vertical boundaries where ground disturbing activities will occur; this accounts for the potential disturbance of any archaeological resources. At the proposed bus parking areas, the vertical boundaries are approximately 8 feet below grade, which accounts for any utility upgrades that will occur at this location.

The broader boundaries of the APE account for potential indirect effects, such as visual and atmospheric alterations to the historic setting and sense of place for historic properties. Therefore, these boundaries extend beyond the project footprint where work is occurring. As stated previously, the APE boundaries primarily coincide with the northern boundary defined by the levees forming the shoreline along San Francisco Bay. The western boundary extends south along the perimeter fence of the airfield before following the boundaries of the expanded NAS Sunnyvale Historic District to include the Shenandoah Plaza area of MFA to the intersection of Wescoat and Dailey roads. The western boundary then shifts south along Dailey Road towards US Highway 101, which forms the southern boundary. The eastern boundary extends north from the US Highway 101 and east along the CAANG cantonment area, following it to the eastern perimeter of MFA to 5th Avenue in Sunnyvale, California. Here the eastern boundary jogs east into the Lockheed Martin Missile and Space Division (LMSD) campus, where it shifts north along H Street and continues north towards the levees at San Francisco Bay.

The location and size of the APE accounts for both potential direct and indirect effects to any historic properties, particularly those within the boundaries of the expanded NAS Sunnyvale Historic District.

⁶ AECOM, "Historic Property Survey Report for the Airfield at NASA Ames Research Center, Moffett Field, California," prepared for NASA Ames Research Center (November 26, 2013), 3-2 – 3-7.



- Undertaking Area / Project Footprint
- Area of Potential Effects (APE)
- Expanded NAS Sunnyvale Historic District

0 1,000 2,000 Feet
(At original document size of 8.5x11)
1:24,000



Project Location Moffett Federal Airfield
Santa Clara County, CA.

Prepared by KM on 2022-05-09
TR by RR on 2022-05-10
IR by ML on 2022-05-11

Project MFA Fleet Maintenance Facility Project
Section 106 Technical Report

Figure No.
2

Title
Undertaking Area of Potential Effects (APE)

- Notes**
1. Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet
 2. Data Sources:
 3. Background: Sources: Esri, HERE, Garmin,

The following content was redacted from this public posting:

5.1 Archaeological

MFA FLEET MAINTENANCE FACILITY PROJECT SECTION 106 TECHNICAL REPORT



5.2 Built Environment

In recent decades, numerous studies have documented and evaluated the historical significance of the built environment at MFA. The following outlines historic surveys and studies relevant to the Undertaking and the associated historic properties identified within the Undertaking APE.

5.2.1 Relevant Previous Studies

5.2.1.1 NRHP Listed NAS Sunnyvale Historic District

In 1994, the NAS Sunnyvale Historic District was identified and listed on the NRHP. The discontinuous historic district comprised the original 1930s portion of MFA, also known as Shenandoah Plaza, which centered around Hangar 1 and the western portion of the MFA property, as well as the Hangars 2 and 3 precinct, located on the eastern side of the airfield.⁷ The historic district was determined significant under Criterion A and Criterion C for its associations with the development of US Naval aviation prior to World War II, and for its unifying architecture exhibited by the collection of Spanish Colonial Revival architecture and for the significant engineering exhibited by Hangar 1, as well as Hangars 2 and 3. The historic district is listed with a period of significance spanning 1930 to 1943, which coincides with the construction of the Shenandoah Plaza portion of MFA, as well as Hangars 2 and 3.

⁷ National Park Service, "National Register of Historic Places Registration Form – US Naval Air Station Sunnyvale, California," Reference #94000045, prepared by Bonnie Bamburg (1991, updated 1994).

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5.2.1.2 Historic Property Survey Report for the Airfield at NASA Ames Research Center, Moffett Field, California (2013)

In 2013, AECOM prepared the *Historic Property Survey Report for the Airfield at NASA Ames Research Center, Moffett Field, California* (HPSR), which identified the NRHP-eligible expanded NAS Sunnyvale Historic District that encompassed the entirety of MFA, primarily the runway network and buildings directly associated with the operation of the airfield and the significant missions. The historic district was identified as significant under criteria A (events) and C (architecture) with a period of significance spanning from 1930-1961. While SHPO concurred with the revised boundaries of the expanded historic district on June 6, 2013, the contributing status of specific properties to the district has not received formal concurrence. However, California Office of Historic Preservation (OHP) staff and NASA have agreed to recognize the identified historic district and its contributors outlined in the 2013 AECOM HPSR as historic properties for the purposes of Section 106 consultation.⁸ As part of the HPSR, new resources within the expanded district boundaries, such as Building 69, were recorded. While the HPSR served as the initial recordation of Building 69, AECOM did not evaluate Building 69 for its significance as an individual resource or contributor to the NAS Sunnyvale Historic District. Building 69 was evaluated for its significance as an individual resource and as a contributor to the NAS Sunnyvale Historic District by Page & Turnbull in their *Proposed Expanded NAS Sunnyvale Historic District Historic Property Survey Report* in 2018. The recordation and evaluation of Building 69 concludes that, while Building 69 is a contributor to the expanded NAS Sunnyvale Historic District, the building is not individually eligible for listing on the NRHP. The current Undertaking's location is within the boundaries of the expanded NAS Sunnyvale Historic District. There are several contributing properties and character-defining landscape features located within the current APE (**Figure 6**).

5.2.1.3 Cold War-Era Resources Survey (1999)

In 1999, a comprehensive historical survey of Cold War-era resources at MFA was conducted by Alexandra C. Cole of Science Applications International Corporation. The resulting document, the *Inventory and Evaluation of Cold War Era Historical Resources* (Cold War Survey), outlines a robust historic context of Naval missions at MFA during the cold-war from 1946 to 1989, focusing specifically on the P-3 Orion Anti-Submarine operations. At the time of evaluation, many properties did not meet the 50-year age threshold required for NRHP eligibility, so many properties were evaluated under Criteria Consideration G: "A property achieving significance within the past 50 years if it is of exceptional importance."⁹ As part of the survey, 148 buildings and structures were

⁸ SHPO letter to Keith Venter, Historic Preservation Officer at NASA ARC, "Section 111 Outlease for Hangar One and Moffett Federal Airfield, NASA Ames Research Center, Moffett Field CA" SHPO Reference: NASA_2013_0417_001 (June 6, 2013).

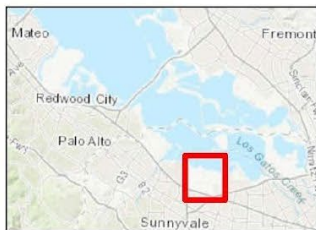
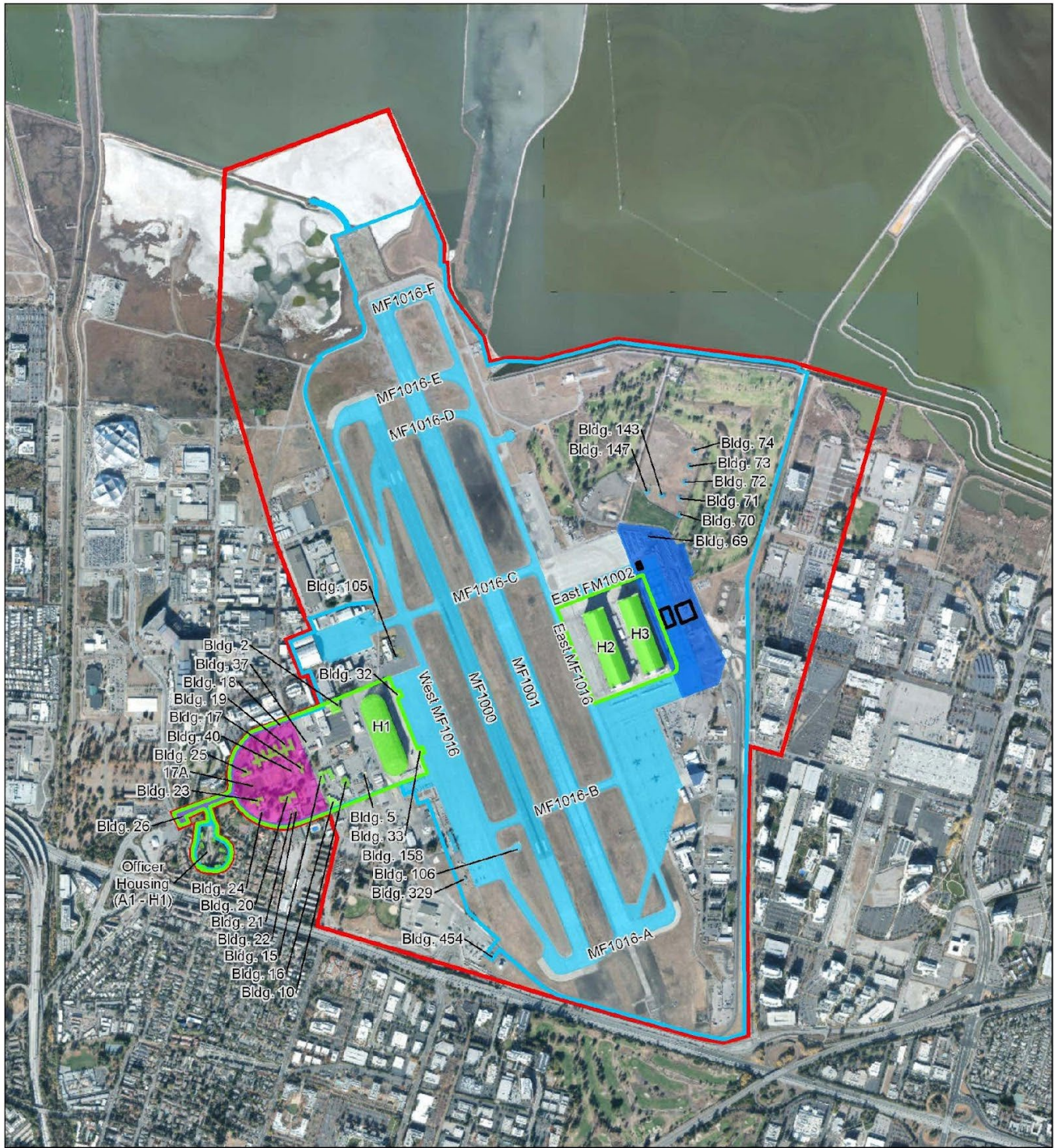
⁹ National Park Service, *National Register Bulletin: How to apply the National Register Criteria for Evaluation* (rev.2002), accessed August 20, 2019, <http://nps.gov/nr/publications/bulletins/nrb15/Index.htm>

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documented and evaluated and NASA requested concurrence from SHPO on the non-eligibility of the Cold War Era buildings and structures at MFA (it is unknown if concurrence from SHPO was received).¹⁰

Resources identified in the Cold War Survey and within the current APE include three buildings: Building 511, Building 684, and Building 686.

¹⁰ NASA ARC letter to Daniel Abeyta, State Historic Preservation Officer, "Cold War Era Survey, Moffett Federal Airfield," SHPO Reference: JFF: 19-12 (October 1, 1998).



Notes
1. Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet
2. Data Sources:
3. Background: Sources: Esri, HERE, Garmin,

- Undertaking Area / Project Footprint
- Area of Potential Effects (APE)
- Proposed Undertaking Complex Footprint
- NAS Sunnyvale Historic District Boundary (NRHP Listed)
- Expanded NAS Sunnyvale Historic District Boundary (NRHP Eligible)
- NAS Sunnyvale Historic District Contributing Property (NRHP Listed)
- Expanded NAS Sunnyvale Historic District Contributing Property (NRHP Eligible)
- Shenandoah Plaza

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Project Location
Moffett Federal Airfield
Santa Clara County, CA.

Prepared by KM on 2022-05-09
TR by RR on 2022-05-10
IR by ML on 2022-05-11

Project
MFA Fleet Maintenance Facility Project
Section 106 Technical Report

Figure No.
4

Title
Expanded NAS Sunnyvale Historic District

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5.2.1.4 Historic Property Survey Report - Defense Fuel Support Point Closure Project (2016)

As part of Section 106 Consultation for the DFSP Closure Project, the AECOM Historic Property Survey Report included a survey of the built environment properties, conducted by qualified architectural historians. This intensive survey included physical descriptions, historic contexts and property-specific histories, and full evaluations for potential NRHP eligibility for the fuel storage tanks (Buildings 137-140) and various elements and structures associated with the existing fuel farm facility. This survey also involved a re-evaluation of MF1003, Building 69, and the Tank Truck Fueling Rack (Building 141), which were previously identified as potentially eligible in the HPSR.

All of the surveyed built environment properties were recommended as not eligible for listing on the NRHP as either individual resources, or contributors to larger historic districts. On June 30, 2016, SHPO largely concurred with these findings that fuel storage tanks, elements of the fuel farm facility, MF1003, and Building 141 were all ineligible for the NRHP and did not qualify as historic properties. However, SHPO disagreed with the recommendation that Building 69 was not a contributor to the broader expanded NAS Sunnyvale Historic District. SHPO requested that the property be treated as historic for the purposes of the DFSP Section 106 Consultation, given that no adverse effect would occur at the property regardless of status. Although further information and analysis regarding its historic status was also requested, at the time, Building 69 was considered a historic property as a contributor to the expanded NAS Sunnyvale Historic District. Building 69 was then evaluated for its significance as an individual resource and as a contributor to the NAS Sunnyvale Historic District by Page & Turnbull in their *Proposed Expanded NAS Sunnyvale Historic District Historic Property Survey Report* in 2018. The recordation and evaluation of Building 69 concludes that, while Building 69 is a contributor to the expanded NAS Sunnyvale Historic District, the building is not individually eligible for listing on the NRHP.

5.2.1.5 Alviso Salt Pond Historic Landscape (2008)

The Alviso Salt Pond Historic Landscape, or Alviso Salt Pond Historic District, is a large cultural landscape defined by the extensive network of salt ponds located across the southern shoreline of San Francisco Bay. Originally identified in 2008 by US Fish and Wildlife Service cultural resources staff, the Alviso Salt Pond Historic Landscape includes 25 salt ponds, extending over 9,600 acres of the southern shoreline. The landscape is largely defined by the extensive network of earthen levees, which divide the salt concentrating ponds into their distinctive spatial organization.¹¹

¹¹ US Fish & Wildlife Service, "US Fish & Wildlife Service Project #FWS040721A Historic Properties Treatment Plan for the Salt Works within the South Bay Salt Pond Restoration Project at the Alviso Don Edwards San Francisco Bay National Wildlife Refuge" in Appendix F of *South Salt Pond Restoration Project, Eden Landing Phase 2 – Environmental Impact Report* (April 2019): Attachment 2, pg.13-18.

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The landscape was found to be eligible for listing on the NRHP under criterion A at the local level for its association with the Solar Salt Industry and the industrial development of the region during the early 20th century. It has an identified period of significance from 1920 to the 1950s, which corresponds with the development of the Solar Salt Industry in the South San Francisco Bay Area.

5.2.1.6 MFA Bus Maintenance Facility Project (2017)

As part of Section 106 Consultation for PV's proposed Bus Maintenance Facility, Page & Turnbull completed a technical report, which included an assessment of the built environment properties conducted by qualified architectural historians. The proposed project consisted of the installation of four steel-frame tent structures east of Hangar 3, arranged in two rows of two for use as a maintenance center for Google's bus fleet. No new buildings were surveyed as part of the project, however, Page & Turnbull had to assess the effects of the project on MF1002 and Building 69. They recommended a finding of no adverse effects, as the project was in the northeast corner of the Eastside Airfield and all the proposed work complied with the SOI Standards for Rehabilitation. SHPO concurred with the findings of the report on December 12, 2017.

5.2.2 Stantec Built Environment Survey and Report (2019)

In March 2019, as part of Section 106 consultation for the EAIP, Stantec architectural historians Daniel Herrick, MHC and Rebecca Riggs, MA, both of whom meet the SOI Qualifications for architectural history and history, conducted a survey of the Eastside Airfield, focusing specifically on Buildings 511, 686, 684, and the Moffett Field Golf Course. Properties were documented using digital photographs and field notes to capture onsite observations. Additional online and local archives and repositories research was conducted to supplement existing documentation. Buildings 511, 686, 684, and the Moffett Field Golf Course were recommended not eligible for the NRHP, individually and as contributors to the NAS Sunnyvale Historic District. Building 686 and 684 were previously recorded as part of the Cold War-Era Resources Survey and were evaluated under Criteria Consideration G as they were not 50 years old at the time. They were found not eligible for the NRHP and are both still under 50 years old, so do not qualify as historic properties under Section 106.

While the newly surveyed properties were not found eligible individually or as contributors to the expanded NAS Sunnyvale Historic District, the development proposed by the EAIP was found to have an adverse effect on several buildings within the historic district, including Hangars 2 and 3, Building 69, buildings associated with the high explosive magazines, and the aircraft parking aprons. The proposed EAIP would result in a change of setting for all affected properties, except for Building 69, which would be demolished as part of the project. A change in setting would occur with the demolition of Building 69 and the addition of a new private hangar and bus maintenance facility on the Eastside Airfield. As part of the Section 106 Technical Report, Stantec

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completed an assessment of effects on the historic properties involved in the project and a cumulative effects analysis on the historic district; the Section 106 process for the EAIP also has involved the development of an MOA to address and mitigate the adverse effects of the EAIP.

In December 2019, Stantec architectural historians and archaeologists performed a desktop survey of the area located directly east of MFA in Sunnyvale, California that was included in the EAIP APE, which is entirely defined by the LMSD Campus. This involved visiting the Northwest Information Center (NWIC) to find previous historic evaluations and reports specific to the area. While records for surrounding areas were found for a variety of previous studies, none were specific to the built environment properties located within this specific portion of the APE. Additional research was conducted, which involved examining and reviewing various public records, including Santa Clara County records, City of Sunnyvale planning documents, and Environmental Impact Reports that were prepared for projects in this specific area.

Due to the highly sensitive nature of the facility and the ongoing programs, a full survey and evaluation of the property for potential NRHP eligibility was not conducted. However, given the advanced nature and high-profile research and development that has occurred at the property, this study assumes that the property would likely be eligible for listing in the NRHP per the Advisory Council on Historic Preservation's (ACHP) guidance on applying NRHP criteria on scientific facilities, specifically as a property "associated with events that have made a significant contribution to, and are identified with, or that outstandingly represent the broad national patterns of United States history and from which an understanding and appreciation of those patterns may be gained."¹² Additionally, while the campus in its current configuration is not yet 50 years of age, the nature of the programs administered at the facilities by LMSD have the potential to be of exceptional significance and could qualify under Criteria Consideration G: Properties that have achieved significance within 50 years. As such, the following analyses of the Undertaking will consider the LMSD campus as a historic property in determining potential adverse effects. Future evaluation of the property should be conducted to fully assess the historical significance and integrity of the campus.

5.2.3 Summary

Based on the results of previous built environment surveys and technical reports, particularly the one conducted by Stantec for the EAIP, and recommendations and concurrence from SHPO, a new built environment survey was not completed for the current Undertaking. The entirety of the expanded NAS Sunnyvale Historic District has been subject to survey, inventory, and evaluation and all properties over 50 years of

¹² Advisory Council on Historic Preservation, *Balancing Historic Preservation Needs with the Operation of Highly Technical or Scientific Facilities* (Washington DC: Advisory Council on Historic Preservation, 1991), 30.

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age have been previously evaluated for eligibility as individual historic properties and as contributors to the NAS Sunnyvale Historic District.

As described above, the APE for the current Undertaking is the same as the APE for the EAIP, and the FMF project is an interim and reduced-scope version of one component of the EAIP, which currently is undergoing its own review process, including a separate Section 106 process with development of an MOA to address the impacts from that future project on historic properties..

5.2.4 Historic Properties in the APE

The following table (**Table 1**) outlines the built environment historic properties located within the APE, as well as the year they were constructed, their historic status and history of previous evaluations, whether the property is located within the project footprint, and their status as a historic property for the purposes of Section 106 consultation.

Table 1: Built Environment Properties Within the Undertaking APE & Historic Property Status

Bldg. #	Bldg. Name (Current/ Historic)	Year Built	Historic Status	Located in Undertaking Area	Historic Property
01	Hangar 1	1931-33	<ul style="list-style-type: none">Individually eligible to NRHPNRHP-listed Contributor to NAS Sunnyvale Historic District	No	Yes
02	Gymnasium/ Balloon Hangar	1931-33	<ul style="list-style-type: none">NRHP-listed Contributor to NAS Sunnyvale Historic District	No	Yes
05	Water Tower	1933	<ul style="list-style-type: none">NRHP-listed Contributor to NAS Sunnyvale Historic District	No	Yes
10	Heat Plant	1933	<ul style="list-style-type: none">NRHP-listed Contributor to NAS Sunnyvale Historic District	No	Yes
15	Security Station/ Fire Station and Laundry	1933	<ul style="list-style-type: none">NRHP-listed Contributor to NAS Sunnyvale Historic District	No	Yes
16	Public Works/ Locomotive Crane Shed	1933	<ul style="list-style-type: none">NRHP-listed Contributor to NAS Sunnyvale Historic District	No	Yes

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Bldg. #	Bldg. Name (Current/ Historic)	Year Built	Historic Status	Located in Undertaking Area	Historic Property
17	Administration/ Admirals Building	1933	<ul style="list-style-type: none"> NRHP-listed Contributor to NAS Sunnyvale Historic District 	No	Yes
17a	Memorial Anchor	1933	<ul style="list-style-type: none"> NRHP-listed Contributor to NAS Sunnyvale Historic District 	No	Yes
18	Unmanned Aerial Vehicle Research Building/ Aerological Center	1933	<ul style="list-style-type: none"> NRHP-listed Contributor to NAS Sunnyvale Historic District 	No	Yes
19	Industry Partners Building/ Bachelor Enlisted Quarters	1933	<ul style="list-style-type: none"> NRHP-listed Contributor to NAS Sunnyvale Historic District 	No	Yes
20	Bachelor Officer Quarters	1933	<ul style="list-style-type: none"> NRHP-listed Contributor to NAS Sunnyvale Historic District 	No	Yes
21	Garages/ Bachelor Officers Garage	1933	<ul style="list-style-type: none"> NRHP-listed Contributor to NAS Sunnyvale Historic District 	No	Yes
22	Garages/ Bachelor Officers Garage	1933	<ul style="list-style-type: none"> NRHP-listed Contributor to NAS Sunnyvale Historic District 	No	Yes
23	Carnegie Mellon University/ Dispensary	1933	<ul style="list-style-type: none"> NRHP-listed Contributor to NAS Sunnyvale Historic District 	No	Yes
24	Carnegie Mellon University Storage/ Ambulance Garage	1933	<ul style="list-style-type: none"> NRHP-listed Contributor to NAS Sunnyvale Historic District 	No	Yes

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Bldg. #	Bldg. Name (Current/ Historic)	Year Built	Historic Status	Located in Undertaking Area	Historic Property
25	Admin. Building/ Recreation Building	1933	<ul style="list-style-type: none"> NRHP-listed Contributor to NAS Sunnyvale Historic District 	No	Yes
26	Gate House	1933	<ul style="list-style-type: none"> NRHP-listed Contributor to NAS Sunnyvale Historic District 	No	Yes
32	North Floodlight Tower	1934	<ul style="list-style-type: none"> NRHP-listed Contributor to NAS Sunnyvale Historic District 	No	Yes
33	South Floodlight Tower	1934	<ul style="list-style-type: none"> NRHP-listed Contributor to NAS Sunnyvale Historic District 	No	Yes
37	Scale House	1933	<ul style="list-style-type: none"> NRHP-listed Contributor to NAS Sunnyvale Historic District 	No	Yes
40	Flagpole & Grounds	1933	<ul style="list-style-type: none"> NRHP-listed Contributor to NAS Sunnyvale Historic District 	No	Yes
46	Hangar 2	1942	<ul style="list-style-type: none"> Individually eligible to NRHP NRHP-listed Contributor to NAS Sunnyvale Historic District 	No	Yes
47	Hangar 3	1943	<ul style="list-style-type: none"> Individually eligible to NRHP NRHP-listed Contributor to NAS Sunnyvale Historic District 	No	Yes
55	Heat Plant	1943	<ul style="list-style-type: none"> NRHP-listed Contributor to NAS Sunnyvale Historic District 	No	Yes
69	Inert Ammunition Storage	1943	<ul style="list-style-type: none"> Identified as a contributor to the potentially eligible expanded NAS Sunnyvale Historic District Not individually eligible for the NRHP 	Yes	Yes

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Bldg. #	Bldg. Name (Current/ Historic)	Year Built	Historic Status	Located in Undertaking Area	Historic Property
70	Fuse & Detonator Magazine	1943	<ul style="list-style-type: none"> Identified as a contributor to the potentially eligible expanded NAS Sunnyvale Historic District Includes the Naval Storage Depot, which is the associated open space around the magazines and located within the boundaries of the existing perimeter security fencing. 	No	Yes
71, 72, 73, 74	High Explosive Magazines	1943	<ul style="list-style-type: none"> Identified as contributors to the potentially eligible expanded NAS Sunnyvale Historic District Includes the Naval Storage Depot, which is the associated open space around the magazines and located within the boundaries of the existing perimeter security fencing. 	No	Yes
105	Airfield Lighting Vault	1947	<ul style="list-style-type: none"> Identified as a contributor to the potentially eligible expanded NAS Sunnyvale Historic District 	No	Yes
106	Aircraft Compass Calibration Pad	1947	<ul style="list-style-type: none"> Identified as a contributor to the potentially eligible expanded NAS Sunnyvale Historic District 	No	Yes
137, 138, 139, 140	Aircraft Fuel Storage Tanks	1952	<ul style="list-style-type: none"> Evaluated as ineligible in Section 106 consultation for the Defense Support Fuel Point Closure project; concurred upon by SHPO in June 2016. 	Yes	No
141	Tank Truck Filling Rack	1952	<ul style="list-style-type: none"> Identified as a contributor to the potentially eligible 	Yes	No

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Bldg. #	Bldg. Name (Current/ Historic)	Year Built	Historic Status	Located in Undertaking Area	Historic Property
			<p>expanded NAS Sunnyvale Historic District</p> <ul style="list-style-type: none"> Evaluated as ineligible in Section 106 consultation for the Defense Support Fuel Point Closure project; concurred upon by SHPO in June 2016. 		
143, 147	High Explosive Magazines	1951	<ul style="list-style-type: none"> Identified as contributors to the potentially eligible expanded NAS Sunnyvale Historic District Includes the Naval Storage Depot, which is the associated open space around the magazines and located within the boundaries of the existing perimeter security fencing. 	No	Yes
158	Flight Operations Building & Tower	1954	<ul style="list-style-type: none"> Identified as a contributor to the potentially eligible expanded NAS Sunnyvale Historic District 	No	Yes
329	Ultra-High Frequency/ Very High Frequency Receiver Building	1958	<ul style="list-style-type: none"> Identified as a contributor to the potentially eligible expanded NAS Sunnyvale Historic District 	No	Yes
442	Ordnance Handling Pad	1956	<ul style="list-style-type: none"> Identified as a contributor to the potentially eligible expanded NAS Sunnyvale Historic District 	No	Yes
454	Ultra-High Frequency/ Very High Frequency Transmission Building	19	<ul style="list-style-type: none"> Identified as a contributor to the potentially eligible expanded NAS Sunnyvale Historic District 	No	Yes

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Bldg. #	Bldg. Name (Current/ Historic)	Year Built	Historic Status	Located in Undertaking Area	Historic Property
511	Weapons Station	1968	<ul style="list-style-type: none"> Evaluated in Cold War Survey and found ineligible for the NRHP under Criteria Consideration G. Evaluated and recommended ineligible for the NRHP by Stantec in 2019 in support of the current Undertaking. 	Yes	No
684	Ground Maintenance Storage	1984	<ul style="list-style-type: none"> Not 50 years old, does not meet the age threshold for NRHP eligibility Evaluated in Cold War Survey and found ineligible for the NRHP under Criteria Consideration G; does not exhibit exceptional significance. 	Yes	No
686	Parachute Repair Building	1984	<ul style="list-style-type: none"> Not 50 years old, does not meet the age threshold for NRHP eligibility Evaluated in Cold War Survey and found ineligible for the NRHP under Criteria Consideration G; does not exhibit exceptional significance. 	Yes	No
934	Moffett Field Golf Course Club House	1959	<ul style="list-style-type: none"> Non-contributor to NAS Sunnyvale Historic District. 	No	No
A1-11	Housing & Garages	1933	<ul style="list-style-type: none"> NRHP-listed Contributor to NAS Sunnyvale Historic District 	No	Yes
MF1000	Runway 32L/ 14R	1938	<ul style="list-style-type: none"> Identified as a contributor to the potentially eligible to expanded NAS Sunnyvale Historic District 	No	Yes

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Bldg. #	Bldg. Name (Current/ Historic)	Year Built	Historic Status	Located in Undertaking Area	Historic Property
MF1001	Instrument Runway 14L/ 32R	1945	<ul style="list-style-type: none"> Identified as a contributor to the potentially eligible to expanded NAS Sunnyvale Historic District 	No	Yes
MF1002	Aircraft Parking Aprons	1945	<ul style="list-style-type: none"> Identified as contributors to the potentially eligible to expanded NAS Sunnyvale Historic District 	Yes	Yes*
MF1003	High-Speed Aircraft Fueling Pits	1955	<ul style="list-style-type: none"> Identified as a contributor to the potentially eligible to expanded NAS Sunnyvale Historic District Evaluated as ineligible in Section 106 consultation for the Defense Support Fuel Point Closure project; concurred upon by SHPO in June 2016. 	No	No
MF1016	Parallel & Connecting Taxiways	Ca.1946	<ul style="list-style-type: none"> Identified as contributors to the potentially eligible to expanded NAS Sunnyvale Historic District. 	No	Yes
n/a	Moffett Field Golf Course	1959, 1968	<ul style="list-style-type: none"> Evaluated and recommended ineligible for the NRHP by Stantec in 2019 in support of the current Undertaking. 	No	No
n/a	Naval Storage Depot	1943	<ul style="list-style-type: none"> Identified as a contributing landscape feature to the potentially eligible expanded NAS Sunnyvale Historic District Concurred up by SHPO as contributing landscape feature in 2013, but additional information requested. 	No	Yes
n/a	Alviso Salt Pond Historic Landscape	Early 20 th century	<ul style="list-style-type: none"> Identified as eligible for the NRHP by the USFWS, confirmed by USACE in 2008. 	No	Yes

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Bldg. #	Bldg. Name (Current/ Historic)	Year Built	Historic Status	Located in Undertaking Area	Historic Property
n/a	LMSD Campus	Ca.1965	<ul style="list-style-type: none"> Unable to evaluate at this time, but being treated as NRHP-eligible for the purposes of this Section 106 consultation 	No	Not Evaluated ⁺

Notes:

* Only portions of the East MF 1002 are located within the identified project footprint, and are associated with the Undertaking.

⁺ Assumed eligible for listing in the NRHP.

5.2.4.1 Affected Historic Properties

The following section outlines the identified historic properties within the APE that have the potential to be affected by the Undertaking (**Figure 5**). This includes a summary of each historic property, including a brief history and status summary, relevant character-defining features, and relative location to the proposed Undertaking.

Of the identified built environment historic properties, only Building 69 and the eastern portion of East MF1002 are located within the project footprint.

NAS Sunnyvale Historic District

As outlined in **Section 5.2.1.1**, the original NAS Sunnyvale Historic District was listed on the NRHP in 1994 and determined significant under Criteria A and C for its associations with the development of US Naval aviation prior to World War II, and for its cohesive collection of Spanish Colonial Revival style buildings and the engineering associated with the hangars. In 2013, the expanded NAS Sunnyvale Historic District was identified and determined eligible for listing on the NRHP with an expanded period of significance of 1930-1961, which included the 1950s jet operations of the early Cold War. The expanded district included large swaths of the MFA property that were left out of the original NRHP-listed district, primarily the central airfield and the eastside portion of the airfield, which includes the munitions handling network and the collections of High Explosive Magazines set within the associated open space of the secured Naval Storage Depot at the northeast corner of the property.

All contributing elements of the NAS Sunnyvale Historic District are located within the APE. This includes all of the contributing airfield features – two runways (MF 1000, MF1001), aircraft parking aprons (MF 1002) on the east and west sides of the airfield, various taxiways (MF 1016), and other features (Buildings 106 and 442) – which are primarily defined by their expansive, flat paved surfaces with axial siting and open

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setting that creates a buffer of open space around each feature. Also included are the supportive airfield operations buildings (Buildings 105, 329, and 454), which are typically simple, prefabricated buildings that house the communication and electrical equipment for the airfield instrumentation, save for the Flight Operations Building & Tower (Building 158), which is a larger two-story building with Mid-Century architectural detailing and prominent control tower.

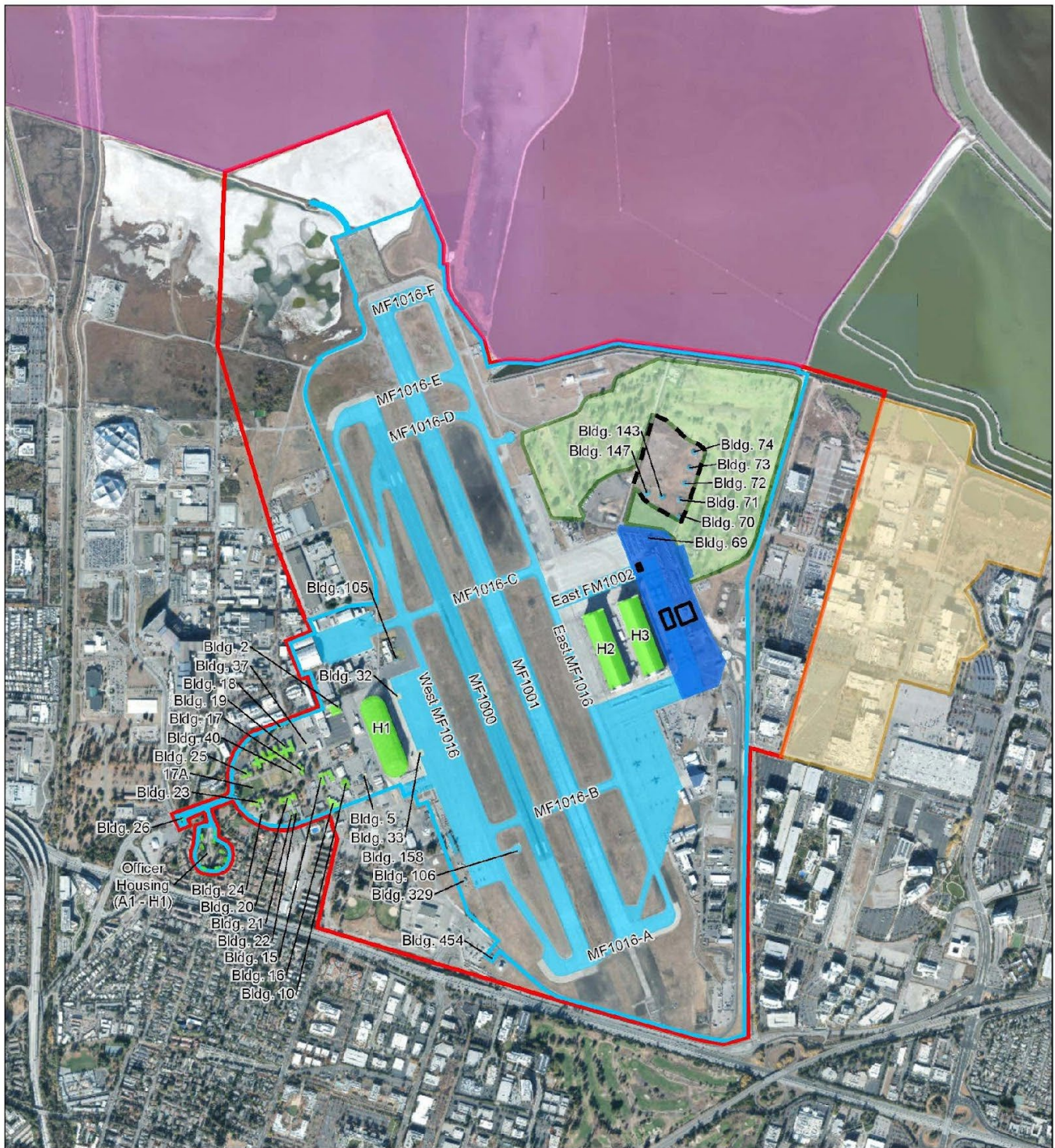
The entirety of the original Shenandoah Plaza portion on the westside of the airfield is also included in the APE, which is comprised of the original 1930s buildings at MFA.

On the eastside of the airfield, the entirety of the Hangar 2/3 precinct is included within the APE, as are the surrounding areas associated with the munitions handling network, which includes the concrete magazines (Buildings 70-74, 143, 147) set within the center of the Naval Storage Depot, as well as the simple, inert ammunition storage building (Building 69), located north of Hangars 2 and 3.

Of the various identified character-defining features, the following are those that are most relevant within the context of the APE and the Undertaking:¹³

- Flat topography with broad open views across the aviation areas.
- Expansive, linear system of airfield runway features, including the two parallel runways, associated taxiway network, and the compass calibration pad.
- Long views along the airfield towards San Francisco Bay and the salt ponds
- Collection of historic aviation facilities along the perimeter of the airfield. This includes both contributing and non-contributing elements, as the general massing and appearance solidify the spatial organization and character of the airfield.
- Visual dominance of Hangar 1 from throughout the airfield.
- Views to Hangars 2 and 3, which frame the eastside of the airfield and spatially balance Hangar 1 to the west. The three hangars are of primary significance, and their massing and appearance support the historic character and integrity of the airfield.
- Ammunition storage and handling features at the northeast corner of the airfield, which include the regularly spaced bunker-like magazines and simple storage facilities, all set within the open space of the Naval Storage Depot.
- Structures associated with aviation lighting, including the two distinct Hangar 1 floodlight towers and simple, utilitarian operations shelters.
- Collective design of buildings and structures and the aesthetics of “futuristic grandeur.”
- Ongoing aviation use.

¹³ AECOM, “Historic Property Survey Report,” 5.4-5.5.



Notes
 1. Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet
 2. Data Sources:
 3. Background: Sources: Esri, HERE, Garmin

- Undertaking Area / Project Footprint
- Area of Potential Effects (APE)
- Proposed Undertaking Complex Footprint
- Expanded NAS Sunnyvale Historic District Boundary (NRHP Eligible)
- NAS Sunnyvale Historic District Contributing Property (NRHP Listed)
- Expanded NAS Sunnyvale Historic District Contributing Property (NRHP Eligible)
- Naval Storage Depot
- Moffett Field Golf Course
- Alviso Salt Pond Historic Landscape
- Lockheed Missile & Space Campus (Presumed NRHP Eligible for this Section 106 Consultation)

0 1,000 2,000 Feet
 (At original document size of 8.5x11)
 1:24,000



Project Location
 Moffett Federal Airfield
 Santa Clara County, CA.

Prepared by KM on 2022-05-09
TR by RR on 2022-05-10
IR by ML on 2022-05-11

Project
 MFA Fleet Maintenance Facility Project
 Section 106 Technical Report

Figure No.
5

Title
Built Environment Historic Properties

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Hangar 1

Hangar 1 is a large, steel framed dirigible hangar located on the westside of MFA. Constructed between 1932 and 1933, Hangar 1 was designed to house the *USS Macon*, a large dirigible aircraft that operated at MFA until it crashed into the Pacific Ocean in 1935. Over the following decades, it continued to house aircraft and support the various airfield missions. The Streamline Moderne inspired structure continues to be the most prominent and iconic historic structure at MFA (**Photograph 3**).



Photograph 3: North and east elevations of Hangar 1, looking south.

The structure has been determined individually eligible for listing on the NRHP for significance associated with Naval history and for its unique engineering and architectural design. In 1994, Hangar 1, as well as the adjacent Moderne style Floodlight Towers (Buildings 32 and 33), was listed on the NRHP as a contributor to the NAS Sunnyvale Historic District.

The most significant character-defining features of the structure include its size and massing, Streamline Moderne style, the “clam shell” doors, the steel exoskeleton structural system, the visual prominence within MFA, and its relationship to the entirety of the sight, particularly to the adjacent Buildings 32 and 33, as well as Hangars 2 and 3, located on the opposite side of the airfield.¹⁴ When it was first identified, the original cladding was considered a character-defining feature, but was removed in the late 2000s; however, efforts to rehabilitate the structure are underway.

¹⁴ Page & Turnbull, Inc. “Hangar One, Moffett Field, California – Re-Use Guidelines,” prepared for NASA/ Ames Research Center (August 24, 2001), 3-4.

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Hangars 2 & 3 – Buildings 46 & 47

Hangars 2 and 3 are large, wood framed dirigible hangars located on the eastside of the Airfield. Constructed between 1942 and 1943, Hangars 2 and 3 are nearly identical hangars based upon a standardized plan that was utilized for similar hangars located at a handful of other airfields that were in operation during World War II (**Photograph 4**). Hangar 2, located directly east adjacent to the airfield, was constructed first, whereas Hangar 3 was constructed second. Both were designed to facilitate the LTA coastal defense program at MFA during World War II, and both were used to house fixed wing aircraft that operated out of MFA over the following decades.

In 1988, both hangars were determined individually eligible for listing on the NRHP for significance associated with events during World War II, and for their overall engineering and design. In 1994, Hangars 2 and 3 were each listed on the NRHP as contributors to the NAS Sunnyvale Historic District as excellent examples of military engineering and design during World War II. In 2013, Hangars 2 and 3 were also identified as contributors to the NRHP-eligible expanded NAS Sunnyvale Historic District, which also includes the airfield features at MFA that were significant to the various missions that took place between 1933-1961. Currently, despite its significance as a contributor to the NAS Sunnyvale Historic District, the demolition of Hangar 3 has been recommended because of its structural instability and the unsafe condition posed.

The most significant character-defining features of both hangars include the distinctively large massing; parabolic roof with corrugated aluminum siding; massive sliding hangar doors with supporting concrete towers, wood box beams, and adjoining clamshell roof; the flanking brick masonry sheds; wood frame truss construction set on repeating concrete bents; expansive interior concrete decking; and the vast open interior volumes. Additionally, the two structures are unique for the parallel siting and nearly identical composition, which creates the paired hangars appearance.

As noted above, demolition of Hangar 3 is proposed as a separate undertaking, in order to address the unsafe condition posed by the hangar's structural instability. The Hangar 3 demolition has its own NASA and SHPO review process, including development of an MOA to address and mitigate the adverse effects from this separate project.

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Photograph 4: North and west elevations of Hangar 2 (right) and Hangar 3 (left).¹⁵

Building 69

Building 69 was constructed in 1943 as an inert munition's storage building, located on the northeastern periphery of the airfield (**Photograph 5**). The simple concrete building was used to store inert munitions following the removal of them from aircraft parked on the adjacent parking apron. It was part of the broader munition's operation at the airfield, which included the magazine storage bunkers located to the northeast.

Character-defining features include the simple footprint and concrete construction, gable roof, limited fenestration, symmetrical composition, and concrete loading platform located outside the primary entrance with paired metal doors. The spatial organization with the airfield, particularly with East MF1002 and the High Explosive ammunition magazines is an important element in the building's setting and associations within the broader ammunition handling network. Building 69 is identified as a contributor within the NRHP-eligible expanded boundaries of the NAS Sunnyvale Historic District; it is not individually eligible for the NRHP.

As noted above, the EAIP proposes to demolish Building 69 as part of its development of a permanent bus maintenance facility; the EAIP has its own review and approval

¹⁵ Photograph accessed from NASA Ames Research Center, Historic Preservation Office, "Hangar 1 – Gallery, Photo #12," accessed May 15, 2020, https://historicproperties.arc.nasa.gov/hangar1/gallery_12.html.

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process, including development of an MOA under Section 106 to address and mitigate the effects on historic properties from that separate future project.



Photograph 5: North and west elevations of Building 69, looking southeast.

MF 1002 – Aircraft Parking Apron

The East MF1002 is an expansive, paved surface located on the eastside of the airfield extending along the East Parallel Taxiway from the CAANG property northwards and surrounding Hangars 2 and 3 (**Photograph 6**). Originally constructed in 1942 as a location for aircraft parking, the Navy expanded East MF1002 to accommodate increased aircraft operations at MFA with the southern apron expanded in the mid-1950s and the northern portion expanded ca.1980.

The West MF 1002 is a similar airfield feature located on the west side of the airfield, directly east adjacent to Hangar 1 and the original Shenandoah Plaza portion of the airfield (**Photograph 7**). As with East MF 1002, West MF 1002 is an expansive, paved surface that was initially constructed as an aircraft apron in 1942 to facilitate the parking and maintenance of aircraft. The apron was later expanded ca.1950 to its current configuration.

The predominant character-defining feature of East and West MF1002 is the flat, paved surface organized in a repeating, squared grid pattern throughout. At the center of many of these repeating squares are embedded aircraft tie downs. While the entirety of the Parking Apron features this repeating pattern, character-defining spaces are those that were constructed within the 1933-1961 period of significance of the expanded NAS Sunnyvale Historic District. For East MF 1002, this includes the areas directly

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surrounding the hangars and to the south. The north ca.1980 portion, which is separated from the character-defining space of East MF1002 by an asphalt paved road, is considered non-character-defining because it was constructed outside the period of significance and is therefore not historic.

The EAIP proposes physical modifications to MF 1002 as part of its development plan; as noted above, the EAIP is subject to its own environmental review process and Section 106 consultation, which has involved the development of an MOA to address and mitigate the adverse effects on historic properties, including cumulative effects, associated with this separate future project at the Eastside Airfield.



Photograph 6: North portion of East MF1002 exhibiting typical conditions; note Hangar 3 north façade at right.

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Photograph 7: North portion of West MF1002 exhibiting typical conditions, looking north.

Airfield Features (MF1000, MF1001, MF1016, Building 442)

The airfield features include the runways, taxiways, and other paved elements that compose the airfield. These are elements that were constructed over various periods, starting as early as 1938 and expanded greatly during World War II and the Cold War-era, specifically the 1950s.

The predominant character-defining features of the airfield features is their flat, paved, and linear nature, as well as their axial orientation and connections that form the broader airfield network. MF1000 and MF1001 as the two runways are the primary features of the airfield, and their parallel axial orientation lend to creating significant view corridors through the NAS Sunnyvale Historic District, particularly the visual connection towards the north and south ends of the airfield. The supporting taxiways of MF1016 are often organized parallel or perpendicular to each other, which facilitate the movement of aircraft leaving and entering the airfield. Collectively, these elements create the vast open space of the airfield, which is center to the district (**Photograph 8**). They all feature broad buffers of open space created by the interstitial sod spaces, as well as the peripheral open space between the surrounding airfield buildings, support structures, and aircraft parking aprons.

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Photograph 8: Airfield at MFA, looking southwest across the east parallel taxiways and runways.

Specific to Building 442, which was constructed as the ordnance handling pad in 1956, the airfield features are defined by its lollipop configuration with a circular concrete pad extending perpendicularly east from the east parallel taxiway. It is where munitions were loaded on to aircraft prior to take off and is considered both part of the airfield infrastructures, as well as part of the larger part of the munitions handling network. In addition to its flat, circular, paved nature, the feature is defined by the open space immediately surrounding it that serves as a buffer (**Photograph 9**).

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Photograph 9: Building 442, looking northeast across the circular ordnance handling pad.

Building 158

Building 158 is located on the westside of the airfield, south of Hangar 1 and adjacent to West MF 1002, acting as a primary circulation point between the landside portions at MFA with the controlled airfield. It was constructed in 1954 as the Air Traffic Operations and Control Tower Building, and continues to operate in this capacity.

Character-defining features of Building 158 include its siting at MFA between the airfield and landside portions of the property, as well as its parallel orientation with the airfield, irregular rectilinear layout, and one-to-two story height with the integrated control tower (**Photograph 10**). Overall, the building has a Mid-Century Modern aesthetic. It has a primarily flat roof profile with overhanging eaves, stucco veneer, and simple metal fenestration in the form of a large, glazed entrance and repeating windows throughout. The tower features a glazed octagonal control room, which provides uninterrupted views across the airfield.

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Photograph 10: Primary (west) elevation of Building 158 with Traffic Control tower at center-right.¹⁶

High Explosive Ammunition Magazines (Buildings 70-74, 143 & 147)

The High Explosive Ammunition Magazines are a collection of linearly oriented and regularly spaced Igloo type magazine bunkers located at the northeast corner of MFA (**Photograph 11**). Initially, constructed in 1942, Buildings 70-64 were part of the broader ammunition handling network at Moffett Field, which involved transportation from the magazines to the airfield, where they were loaded on to aircraft at East MF1002. Once used, inert ammunition was stored in Building 69, located northeast of East MF1002. In the 1950s, the ammunition network was expanded with the construction of new magazines of Building 143 and 147, as well as Building 442. All of the magazines were purposely arranged and set within open space to create a Naval Storage Depot that is separated from other uses in the vicinity. Around 1968, several munition loading circles located on the west portion of the northeast corner, all of which were arranged in an arc, were removed and the area was developed as part of the Moffett Field Golf Course expansion to its 18-hole configuration.

Character-defining features of the Igloo type ammunition magazines include circular layouts with a large metal door leading inside the bunker and an adjacent concrete blast wall. The two elements of are semi-circular, which together create a bisected circular

¹⁶ Photograph accessed from NASA Ames Research Center, Historic Preservation Office, "Hangar 1 – Gallery, Photo #19," accessed May 15, 2020, https://historicproperties.arc.nasa.gov/hangar1/gallery_19.html

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footprint, and are largely covered in rock and earth that create a mound appearance. The linear, regularly spaced arrangement of buildings set within a large open space known as the Naval Storage Depot, which is demarcated by a chain link fence that surrounds the perimeter of the zone and extends 100 feet from the closest magazine. These magazines are identified as contributors within the NRHP-eligible expanded boundaries of the NAS Sunnyvale Historic District.



Photograph 11: Buildings 73 and 72 with typical High Explosive Magazine design and surrounding open space of the Naval Storage Depot behind the chain link fence, looking southeast.

Naval Storage Depot

The Naval Storage Depot is defined as the open and undeveloped space surrounding the High Explosive Magazines. Originally, the majority of the northeast area of MFA was used for this purpose; however, following World War II and the Korean War, much of the area was repurposed as the mission at MFA changed, airfield operations expanded, and new uses identified. In 1959, the Moffett Field Golf Course was constructed adjacent to the High Explosive Magazines, and the expansion of the course in 1968 led to the construction of the golf course around the Naval Storage Depot. This neighboring use was considered appropriate as it would retain a limited low-density development of the area surrounding the magazines. However, as development continued in the area, the Naval Storage Depot became increasingly defined through the installation of perimeter security fencing, which has continued to define the area around the magazine structures.

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The Naval Storage Depot and its undeveloped open space is an associated feature of the contributing High Explosive Magazines and the larger munitions handling network located throughout the northeast corner of the expanded NAS Sunnyvale Historic District. Its character defining features include the low-density quality of the landscape with the magazines located near the center with the established secure perimeter (**Photograph 11**). As such, the Naval Storage Depot is an important part of the design and setting of the expanded NAS Sunnyvale Historic District, but more specifically, the collection of the High Explosive Magazines.

Alviso Salt Pond Historic Landscape

The Alviso Salt Pond Historic Landscape is defined by an extensive network of earthen levees that extends across over 9,000 acres in the south San Francisco Bay (**Photograph 12**). Constructed in the early 20th century for the production of salt, the Alviso Salt Ponds were found to be eligible in 2008 for listing on the NRHP as a historic district under Criterion A at the local level for significance associated with the development of the solar salt industry. The extensive salt ponds and levee network continue to be a defining element of the south San Francisco Bay area.

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Photograph 12: Aerial photograph of the eastern portion of the Alviso Salt Ponds, looking southwest with MFA near top right.¹⁷

6.0 Assessment of Effects

Per 36 CFR 800.5(a)(1) of the NHPA, the Criteria of Adverse Effects are applied to assess potential effects of the Undertaking on historic properties located within the associated APE:

(1) Criteria of adverse effect. An Adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the NRHP in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property including those that may have been identified subsequent to the original evaluation of the property's eligibility for the NRHP. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance, or be cumulative.

Examples of adverse effects on historic properties, per 36 CFR 800.5(a)(2) include, but are not limited to, the following:

¹⁷ "Alviso Salt Ponds Aerial," Wikimedia Commons, accessed April 12, 2020, https://commons.wikimedia.org/wiki/File:Alviso_salt_ponds_aerial.jpg.

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- i) Physical Destruction of or damage to all or part of the property.
- ii) Alteration of a property including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped accesses that is not consistent with the Secretary's standards for the treatment of historic properties (36 CFR Part 68) and applicable guidelines.
- iii) Removal of the property from its historic location.
- iv) Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance.
- v) Introduction of visual atmospheric, or audible elements that diminish the integrity of the property's historic features.
- vi) Neglect of a property which causes deterioration except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization.
- vii) Transfer, lease, or sale of a property out of Federal ownership or control without adequate legally enforceable restrictions or conditions to ensure long-term preservation of the property's significance.

The following analysis evaluates each component of the Undertaking for potential effects on historic properties using the above example criteria and Secretary of the Interior's Standards for Rehabilitation in order to fully conceptualize the potential for adverse effects that may result indirectly from the Undertaking.

6.1 Fleet Maintenance Facility

The proposed FMF of the Undertaking involves the maintenance and operations tents and trailer complex, bus washing facility, and reconfiguration of the bus surface parking facility. This portion of the Undertaking is located entirely within the boundaries of the expanded NAS Sunnyvale Historic District and is adjacent to many contributing properties.

6.1.1 Criterion i

Physical Destruction of or damage to all or part of the property.

In terms of archaeological resources, there are no known sites located in the project footprint associated with the FMF. Additionally, the majority of this portion of the project footprint overlaps with areas identified as having low archaeological sensitivity, except for a small portion at the northeast corner of the FMF project area, which corresponds with an area identified as having heightened historic-era archaeological sensitivity. While there is some overlap with this sensitivity area, the location has been heavily

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disturbed and subject to numerous investigations, none of which have uncovered any evidence of archaeological resources. Despite the low likelihood for any archaeological sites to be present in the area associated with the FMF, the potential for any unknown sites to be extant in the project footprint associated with the FMF is recognized. Therefore, it is recommended that a monitor be onsite when ground disturbing activities overlap with, or in the vicinity of, identified areas of heightened archaeological sensitivity. Therefore, the Undertaking would not result in adverse effects to archaeological historic properties under this example.

For built environment resources, the FMF tents and structures would not involve the destruction of any existing buildings or structures on the Eastside Airfield or physical damage to any part of the property with the Undertaking area. Installation of utilities would temporarily disturb the surface of MF1002 (aircraft parking apron), but the disturbance would be minimal, and the areas of disturbance would be restored to match existing, pre-project conditions following the completion of project construction.

As such, the Undertaking would not result in adverse effects to historic properties under this example.

6.1.2 Criterion ii

Alteration of a property including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped accesses that is not consistent with the Secretary's standards for the treatment of historic properties (36 CFR Part 68) and applicable guidelines.

Rehabilitation Standard 1

A property will be used as it was historically, or be given a new use that maximizes the retention of distinctive materials, features, spaces, and spatial relationships.

The FMF would not result in changes to the current use of any historic property, including aviation and ongoing operations within the NAS Sunnyvale Historic District. The FMF project area is already being utilized for surface parking, maintenance, and other operations related to the existing bus fleet. Since PV entered the Adaptive Reuse lease in 2014, their operations have maximized the retention of distinctive materials and maintained aviation operations within the historic district. As part of the proposed expansion and electrification of the existing bus fleet, the property will continue to be used as it was historically, while retaining materials, features, spaces, and spatial relationships.

Therefore, the FMF is consistent with Rehabilitation Standard 1.

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Rehabilitation Standard 2

The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces and spatial relationships that characterize a property will be avoided.

Maintenance Tents

The proposed maintenance tents will not involve the removal of any distinctive materials or alterations of features, spaces, and spatial relationships that characterize the historic property. The tents will be sited on a portion of the existing, non-contributing bus surface parking lot at the periphery of East MF1002 and the airfield. The proposed tents will be placed east of Hangars 2 and 3. They will be lower than the hangars by at least 120 feet and therefore visually obscured from most of the contributors to the historic district. Even with the removal of Hangar 3 as a separate undertaking, the views of the tents would still be obscured by Hangar 2. This placement, coupled with its simple massing, will not visually disrupt the significant view corridors of the expanded NAS Sunnyvale Historic District across and throughout the airfield, nor will it encroach upon the character-defining flat, open topography of the west-adjacent East MF 1002, which also serves as an integral aspect of setting to Hangar 2, Hangar 3, and other historic properties on the eastside of the airfield.

Therefore, the addition of four new maintenance tents is consistent with Rehabilitation Standard 2.

Trailer Complex

The proposed expanded trailer complex will not involve the removal of any distinctive materials or alterations of features, spaces, and spatial relationships that characterize the historic property. The reconfigured complex will be sited on a portion of the existing, non-contributing bus surface parking lot at the periphery of East MF1002 and the airfield, where there is currently a smaller trailer complex in use. The proposed trailer complex will be placed east of Hangars 2 and 3. They will be lower than the hangars by at least 120 feet and therefore visually obscured from most of the contributors to the historic district. Even with the removal of Hangar 3 as a separate undertaking, the views of the tents would still be obscured by Hangar 2. This placement, coupled with its simple massing, will not visually disrupt the significant view corridors of the expanded NAS Sunnyvale Historic District across and throughout the airfield, nor will it encroach upon the character-defining flat, open topography of the west-adjacent East MF 1002, which also serves as an integral aspect of setting to Hangar 2, Hangar 3, and other historic properties on the eastside of the airfield.

Therefore, the reconfiguration and expansion of the trailer complex is consistent with Rehabilitation Standard 2.

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Bus Washing Facility

The bus washing facility will be a simple, portable building located at the periphery of the eastside portion of the airfield. Similar to the maintenance tents, this building will be placed on the non-contributing existing bus parking lot, which will not alter any distinctive features or materials associated with East MF1002, or any other historic properties. This placement is well outside the significant view corridors of the expanded NAS Sunnyvale Historic District, plus its restrained height and simple massing will have no physical disruption on the spatial organization of any historic properties in the vicinity.

Therefore, the bus washing facility will adhere to Rehabilitation Standard 2.

Bus Parking Lots

The bus surface parking lot is currently being utilized for bus parking, which is not inconsistent with its historic use as aircraft parking. The expansion and reconfiguration of this continued use will be a minor and insignificant departure from the existing conditions. While the expansion of the bus parking associated with this reconfiguration will expand on to East MF1002, the property will be mostly retained in its existing condition. East MF1002 was originally constructed for the purposes of parking aircraft. While it will be repurposed to serve buses, the slight variation in use will not result in a material departure that will affect the setting of the property, nor any of the other historic properties within the expanded NAS Sunnyvale Historic District.

The primary alterations associated with this portion will be cosmetic through painting of parking striping and traffic circulation lines. While this will be a new minor visual element, this will not disrupt the overall character-defining gridded paved quality of the historic property and will be limited to the eastern most area. Further, no other historic property will be indirectly affected by this reconfiguration of the parking spaces.

Therefore, the bus parking lots will adhere to Rehabilitation Standard 2.

Rehabilitation Standard 3

Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, will not be undertaken.

The FMF will not create a false sense of historical development through the addition of conjectural features or other historical materials. All elements proposed as part of the project will be clearly differentiated from the contributing elements of the NAS Sunnyvale Historic District. Therefore, the FMF will adhere to Rehabilitation Standard 3.

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Rehabilitation Standard 4

Changes to a property that have acquired historic significance in their own right will be retained and preserved.

The FMF will not affect any portion of a property that has acquired significance in their own right. The project area associated with the FMF, and immediate surroundings, have been extensively studied, including recent evaluations of the former fueling infrastructure, Golf Course, and Building 934, none of which qualify as historic properties. Therefore, the FMF will adhere to Rehabilitation Standard 4.

Rehabilitation Standard 5

Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.

As described previously, the FMF is predominantly centered on the existing paved surface lot, located northeast of East MF1002 and south of Building 69. This is where the maintenance tents, trailer complex, and bus washing facility will be located; the construction of these facilities will not affect the historic paved surface associated with MF1002. As noted above, the installation of utilities would temporarily disturb the surface of MF1002, but the disturbance would be minimal and the areas of disturbance would be restored to match existing, pre-project conditions following the completion of project construction. Additionally, the parking upgrades will involve the painting of parking and circulation striping on a portion of MF1002, but this will not physically alter the gridded paved surface of the aircraft parking apron and will not affect the historic character or integrity of the apron. Further, surface variations on the eastern side of MF1002, where there are curb stops and aircraft tie downs, will be filled in with grout, but the historic features of MF1002 would be preserved, the historic character and integrity of the apron will not be adversely affected, and the grout (like the painted striping) could easily be removed, thus allowing for the reversion of the apron to its existing pre-project condition.

The existing bus shelters, specifically designed as temporary, will be removed without damaging the existing paved surface of the apron, and their removal will not directly alter East MF1002. The FMF includes the installation of approximately 25 electric bus charging stations for the future bus fleet (bringing the total to 30 chargers, as there are five existing chargers). The disturbance required to construct these elements will not result in any damage to the East MF1002, as the chargers will be installed on the existing, non-contributing bus parking lot.

Therefore, the FMF will adhere to Rehabilitation Standard 5.

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Rehabilitation Standard 6

Deteriorated historic features will be repaired rather than replaced. Where the severity of the deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities, and, where possible, materials. Replacement of missing features shall be substantiated by documentary and physical evidence.

The FMF does not involve the treatment of any deteriorated features belonging to a historic property and, therefore, will adhere to Rehabilitation Standard 6.

Rehabilitation Standard 7

Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.

The Undertaking proposes no chemical or physical treatments to historic materials. Therefore, the FMF will adhere to Rehabilitation Standard 7.

Rehabilitation Standard 8

Significant archaeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.

As described previously, there are no known archaeological resources in the direct APE associated with the FMF. The majority of the FMF is in an area identified as having low archaeological sensitivity, except for a portion of the northeast area of the project area, which is identified as having heightened historic-era archaeological sensitivity. Although this area is extensively disturbed and previously surveyed with no evidence of cultural materials or sites, it is acknowledged that potential materials may be extant and an archaeology monitor will be present during construction activities in the areas that overlap with, and are adjacent to, the identified area of archaeological sensitivity. If any materials are discovered during construction, all work will cease and the NASA ARC Inadvertent Discovery Policy, Standard Operating Procedure 8 in the ICRMP, will be followed. Therefore, the FMF will adhere to Rehabilitation Standard 8.

Rehabilitation Standard 9

New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the historic integrity of the property and its environment.

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Maintenance Tents

The design of the maintenance tents will be both differentiated and compatible within the context of the NAS Sunnyvale Historic District. First, the proposed structures will be contemporary in design and construction and will not create a false sense of history and historical development in the setting of the district. At the same time, the simple and utilitarian composition of the design will reflect upon several character-defining features found consistently throughout the historic district. The proposed tents will be the same prefabricated construction as the existing maintenance tents (see **Photograph 1**) and will feature a simple rectangular plan, massing, and composition that reflects upon these structures and other historic properties found throughout the historic district. Second, the tents will have a relatively restrained height, which will not visually detract from the monumental prominence of Hangars 1, 2, and 3 within the setting of the historic district. The maintenance tents will be oriented parallel to Hangars 2 and 3, which will be consistent with the existing spatial organization of these structures, as well as the contributing airfield infrastructure, such as runways and taxiways.

In terms of materials, the maintenance tents will likely feature an industrial material palette of metal and cloth panels and metal framing. This is directly reflecting construction materials of other historic properties within the APE, which feature various industrial materials as cladding, including corrugated sheet metal, insulated panels, and concrete.

Overall, the design of the maintenance tents will adhere to Rehabilitation Standard 9, particularly given the design approach outlined in **Section 2.2**, which will guide the design team to create a design that is both compatible and differentiated from the NAS Sunnyvale Historic District and its contributors.

Trailer Complex

The design of the trailer complex will be both differentiated and compatible within the setting of the expanded NAS Sunnyvale Historic District. The prefabricated trailers will be contemporary in design and construction and will not create a false sense of history, while also exhibiting a simple and utilitarian aesthetic, which is consistent throughout MFA. The trailer complex will reflect common elements of the district, including a simple rectilinear massing and layout, as well as an industrial material palette of metal siding and fenestration (see **Photograph 2**). The trailer complex will have a relatively restrained height, and will not visually alter or detract from the monumental prominence of neighboring Hangars 2 and 3. The trailer complex will be sited parallel to the Hangars 2 and 3, therefore retaining consistency with the organization of the primary airfield features.

Overall, the design of the trailer complex will adhere to Rehabilitation Standard 9, particularly given the design approach outlined in **Section 2.2**, which will guide the

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design team to create a design that is both compatible and differentiated from the NAS Sunnyvale Historic District and its contributors.

Bus Washing Facility

The design of the simple, single-story portable building will be both differentiated and compatible within the setting of the expanded NAS Sunnyvale Historic District. The building will be contemporary and will not create a false sense of history, while also exhibiting a utilitarian aesthetic, which is consistent throughout MFA. The building will reflect common elements of the district, including a simple rectilinear massing and layout, as well as an industrial material palette of concrete with metal fenestration (in many ways similar to the prefabricated trailers in the trailer complex). The building will also be short in height, particularly in relation to the monumental hangars, which are the most prominent contributors within the district. The bus washing facility will be sited parallel to Hangars 2 and 3 (other than utility connections, it will be a portable building), and will thus be consistent with organization of the primary airfield features; it also will feature an open pass through at the north and south elevations, which is similar to the openings at both Hangar 2 and 3. Due to the small size and scale of the bus washing facility, it will not change the visual effect after the demolition of Hangar 3.

Overall, the design of the bus washing facility will adhere to Rehabilitation Standard 9, particularly given the design approach outlined in **Section 2.2**, which will guide the design team to create a design that is both compatible and differentiated from the NAS Sunnyvale Historic District and its contributors.

Bus Parking Lots

As described above, the majority of the bus parking lot improvements will occur at non-contributing areas of the existing parking lot, although some improvements will extend over the character-defining paved surface of East MF1002. The parking improvements would involve painting of striping, but the improvements will be minor, will not physically alter the gridded paved surface of the aircraft parking apron, and will not affect the historic materials and features of the apron or the spatial relationships that characterize the site. The historic character of East MF1002 and its associations with aircraft parking and maintenance would accordingly be retained.

Therefore, the bus parking lots will adhere to Rehabilitation Standard 9.

Rehabilitation Standard 10

New additions and adjacent or related new construction shall be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired

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Maintenance Tents

The maintenance tents will be constructed on the non-contributing asphalt bus parking lot at the eastern side of MFA. If removed in the future, there will be no impairment to the essential forms and integrity of any historic property. Therefore, the maintenance tents will adhere to Rehabilitation Standard 10.

Trailer Complex

The trailer complex will be constructed on the non-contributing asphalt bus parking lot at the eastern side of MFA. If removed in the future, there will be no impairment to the essential forms and integrity of any historic property. Therefore, the trailer complex will adhere to Rehabilitation Standard 10.

Bus Washing Facility

The bus washing facility will be constructed on the non-contributing asphalt bus parking lot at the eastern side of MFA. If removed in the future, there will be no impairment to the essential forms and integrity of any historic property. Therefore, the bus washing facility will adhere to Rehabilitation Standard 10.

Bus Parking Lots

At the portions of the proposed bus parking lot improvements that extend onto East MF1002, the parking and traffic circulation lines could easily be removed from the historic pavement, reverting it to its existing condition leaving the character-defining pavement with its essential form and integrity. Therefore, the bus parking lots will adhere to Rehabilitation Standard 10.

6.1.3 Criterion iii

Removal of the property from its historic location.

As described above, the FMF will not result in the removal of any properties from their historic locations at MFA. Therefore, the FMF will not cause an adverse effect to historic properties under this example.

6.1.4 Criterion iv

Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance.

As described in the analysis above, many of the features associated with the FMF, specifically the maintenance tents, trailer complex, and bus washing facility, will be of similar historic use at the eastside portion of the airfield through the parking and maintenance of vehicles, albeit buses rather than aircraft. These scope elements will

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not alter any physical features or broader character of the expanded NAS Sunnyvale Historic District or its contributors. At the portions of the proposed bus parking lot improvements that extend onto East MF1002, the minor addition of painted striping for parking purposes and the use of grout to fill in surface variations where tie downs are present will not materially alter the use of the area and will have an insubstantial effect on the physical properties that make the apron a contributor to the NAS Sunnyvale Historic District. Additionally, both the parking and traffic circulation lines and the grout could easily be removed, thereby allowing for the reversion of the apron to its existing, pre-project conditions.

Therefore, the FMF will not cause an adverse effect to historic properties under this example.

6.1.5 Criterion v

Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's historic features.

Upon completion of the Undertaking, audible and atmospheric conditions will be comparable to those currently existing and those that likely existed during the period of significance. It was and is an active air base with its associated significant noise levels and aircraft fuel combustion.

As demonstrated above, the placement and designs of the maintenance tents, trailer complex, and bus washing facility will not visually diminish the integrity of the adjacent historic property's historic features, specifically the character-defining open, expansive paved surface of East MF1002, or the monumentality of Hangars 2 and 3 within the setting of the expanded NAS Sunnyvale Historic District.

The bus parking lot reconfiguration is primarily defined by the painting of parking and traffic circulation striping at East MF1002, which will not visually detract from, nor diminish the integrity of, the historic property's character-defining open paved surface.

Therefore, the FMF will not cause an adverse effect to historic properties under this example.

6.1.6 Criterion vi

Neglect of a property which causes deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian Tribe or Native Hawaiian Organization

The FMF would not involve the neglect of a property that causes its deterioration and, therefore, would not cause an adverse effect to historic properties under this example.

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6.1.7 Criterion vii

Transfer, lease, or sale of a property out of Federal ownership or control without adequate legally enforceable restriction or conditions to ensure long-term preservation of the property's significance.

The FMF would not involve the transfer, lease, or sale of a property out of Federal ownership or control and, therefore, would not cause an adverse effect to historic properties under this example.

6.2 Cumulative Effects to the NAS Sunnyvale Historic District

The proposed Undertaking involves the construction of several new facilities and site improvements located at the eastside of the airfield; the Undertaking is located entirely within the boundaries of the NAS Sunnyvale Historic District. As explained above, the FMF project will not cause an adverse effect to the Historic District either as a whole or to any sites that contribute to the District's historical significance. As a result, this report concludes that the Undertaking qualifies for a Finding of No Adverse Effect under the criteria set forth in the Section 106 regulations. Installation of utilities for the Undertaking would cause some disturbance to the surface of one portion of one contributing resource (MF1002), but the disturbance would be minimal, and the areas of disturbance would be restored to match existing, pre-project conditions upon the completion of construction, following the SOI Standards for Rehabilitation. The parking upgrades would involve painting of striping, but this would not physically alter the gridded paved surface of MF1002 and will not affect the historic character or integrity of the apron or the spatial or visual relationships among the contributing resources to the Historic District. Further, surface variations on MF1002 where tie downs are present will be filled in with grout, but this similarly will not affect the historic character or integrity of the apron, and like the painted striping the grout could easily be removed, thereby allowing for the reversion of the apron to its existing condition.

As explained above, there are other, separate proposed undertakings at the Eastside Airfield that will (unlike the FMF) cause adverse effects to historic resources within the NAS Sunnyvale Historic District. Specifically, under one separate undertaking, Hangar 3 is proposed for demolition to address an unsafe condition posed by the hangar's structural instability. The EAIP is another proposed undertaking (involving development of office space, expansion of a private hangar, and associated site improvements, in addition to construction of a permanent bus maintenance facility expansion) that would demolish Building 69 and result in an adverse effect on MF1002 due to its expanded project scope, layout and construction in comparison with the interim, reduced-scope nature of the current FMF proposal. Both of these separate projects have their own review and approval process, including environmental review by NASA and

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development of an MOA under Section 106 to address project-level and cumulative effects on the NAS Sunnyvale Historic District and its contributing properties. The two MOAs will ensure that the cumulative effects resulting from these two projects, if they are approved, will be adequately addressed and mitigated pursuant to the NHPA.

It is also important to note that the cumulative effects resulting from the Hangar 3 demolition and the EAIP would be concentrated in the eastern portion of the NAS Sunnyvale Historic District. In turn, there are fewer contributors to the historic district located in the eastern portion of the District, as compared to the western portion of the District. Most of the significant buildings and structures are located on the western portion of the District, which encompasses the original NAS Sunnyvale Historic District that is listed on the NRHP, including Hangar 1 and Shenandoah Plaza and all its surrounding buildings.

Within the District, there are 14 contributors that are located near the Undertaking, including Hangars 2 and 3, Building 69, Buildings 70-74 (high explosive magazines), 143-147 (high explosive magazines), MF1002 (aircraft parking apron), and the Naval Storage Depot. The proposed Undertaking will not result in any adverse effects to the 14 contributors on the Eastside Airfield, and will not alter any spatial alterations within the District or among its contributing resources.

With respect to the separately proposed Hangar 3 demolition, while Hangar 3 is a significant contributing resource to the NAS Sunnyvale Historic District, Hangar 2 is virtually identical in scale and materials and will not be removed. In addition, Hangar 2 blocks the view of Hangar 3 from much of the western side of the historic district, reducing the effects of removing Hangar 3. Thus, the proposed demolition of Hangar 3 will not alter the potential effects of the Undertaking on significant view corridors, as Hangar 2 will still be in place to separate the new facilities on the eastern periphery of the district from the contributing district elements that are located in the center and along the western periphery of the district. Additionally, as noted above, the Hangar 3 demolition project – like the separately proposed EAIP – includes an MOA to address and mitigate its adverse effects, including cumulative effects.

In terms of visual effects, the preliminary siting, design, and design conditions of the proposed facilities (outlined in **Section 2.2**) will move to create facilities that are both compatible, yet differentiated, within the setting of the NAS Sunnyvale Historic District. As outlined in the previous sections and the analysis of each facility in relation to the relevant contributors of the district, siting of the facilities takes into consideration placement of the buildings and structures in relation to significant features of the Historic District, including setting. All major facilities are sited in a way that will not physically affect contributing elements to the district, while also being set back from flat and expansive airfield features to respect the open visual characteristics, spatial organizations, and buffers associated with significant spaces. Additionally, the placement of all facilities, primarily towards the eastern periphery of the district, respects

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the more centrally located contributing elements of the airfield. This also leaves the significant view corridors – between Hangars 1 and Hangars 2/3, views across the airfield towards San Francisco Bay and the control tower at Building 158 – in their existing condition. With the proposed demolition of Hangar 3, the existing significant view corridor between Hangar 1 and Hangar 2 will remain intact, as will the views across the airfield towards San Francisco Bay.

As noted above, the proposed demolition of Hangar 3 will not alter the potential effects of the Undertaking on significant view corridors, as Hangar 2 will still be in place to separate the new facilities on the eastern periphery of the district from the contributing district elements that are located in the center and along the western periphery of the district. All buildings and structures will be clearly contemporary in design and will not create a false sense of historical development in the district, and will be smaller in height compared to the monumental nature of remaining Hangars 1 and 2, should Hangar 3 be removed, preserving their visual prominence within the setting of the airfield. The placement of the Undertaking's buildings also respects the established pattern of development of the airfield, leaving the main central runway features and original 1930s Shenandoah Plaza portion intact with more modern and contemporary supportive facilities constructed along the airfield perimeter. While the buildings and structures will likely have a more contemporary style, they will feature design elements and materials that reflect the existing vocabulary of the district yet remain subordinate in scale and design compared to the extant district contributors.

In summary, the Undertaking would not have an adverse effect on historic properties, including any contribution to cumulative effects caused by separate undertakings proposed at the Eastside Airfield, which are being resolved in any event through development of MOAs for each such separate undertaking.

6.3 Summary of Effects of the Undertaking

Although there are no known archaeological resources in the project footprint, there is the potential for unknown resources to be extant. While previous surveys indicate no evidence of archaeological resources in this vicinity, an archaeological monitor will be present during initial ground disturbing activities. In the event that archaeological materials are discovered, all work in the vicinity of the discovery will be halted, the NASA Cultural Resources Manager will be notified, and appropriate steps outlined in the ICRMP Standard Operating Procedure 8: Inadvertent Discovery, will be implemented, resulting in no adverse effects.

With respect to built resources, the Undertaking will not result in any adverse effects to the expanded NAS Sunnyvale Historic District or any contributors to the District. As explained above, the components of the Undertaking have all been designed to adhere to all of the SOI Standards for Rehabilitation.

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Based upon the project design, the overall stylistic treatment of the main facilities – the bus maintenance tents, trailer complex, and bus washing facility – will be differentiated within the NAS Sunnyvale Historic District as contemporary structures, while also being compatible within the setting of the expanded NAS Sunnyvale Historic District through placement, massing, and adhering to a comparable aesthetic vocabulary and material palette. Further, the project design will adhere to the approach outlined in **Section 2.2**, which outlines a series of criteria to ensure that the Undertaking is designed and implemented in a way that is sensitive to the historic character of the district.

Table 2 lists the historic properties in the APE and anticipated project effects on each historic property.

Table 2. Summary of Historic Properties Affected

Bldg. #	Bldg. Name	Effects
01	Hangar 1	No Adverse Effect
02	Gymnasium/ Balloon Hangar	No Effect
05	Water Tower	No Effect
10	Heat Plant	No Effect
15	Security Station/ Fire Station and Laundry	No Effect
16	Public Works/ Locomotive Crane Shed	No Effect
17	Administration/ Admirals Building	No Effect
17a	Memorial Anchor	No Effect
18	Unmanned Aerial Vehicle Research Building/ Aerological Center	No Effect
19	Industry Partners Building/ Bachelor Enlisted Quarters	No Effect
20	Bachelor Officer Quarters	No Effect
21	Garages/ Bachelor Officers Garage	No Effect
22	Garages/ Bachelor Officers Garage	No Effect

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Bldg. #	Bldg. Name	Effects
23	Carnegie Mellon University/ Dispensary	No Effect
24	Carnegie Mellon University Storage/ Ambulance Garage	No Effect
25	Admin. Building/ Recreation Building	No Effect
26	Gate House	No Effect
32	North Floodlight Tower	No Adverse Effect
33	South Floodlight Tower	No Adverse Effect
40	Flagpole & Grounds	No Effect
46	Hangar 2	No Adverse Effect
47	Hangar 3	No Adverse Effect (but demolition is proposed as part of the Hangar 3 demolition project, which is a separate undertaking)
55	Heat Plant	No Effect
69	Inert Ammunition Storage	No Adverse Effect (but demolition is proposed as part of the EAIP, which is a separate undertaking)
70	Fuse & Detonator Magazine	No Adverse Effect
71, 72, 73, 74	High Explosive Magazines	No Adverse Effect
105	Airfield Lighting Vault	No Effect
106	Aircraft Compass Calibration Pad	No Adverse Effect
137, 138,	Aircraft Fuel Storage Tanks	N/A

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Bldg. #	Bldg. Name	Effects
139, 140		
141	Tank Truck Filling Rack	N/A
143, 147	High Explosive Magazines	No Adverse Effect
158	Flight Operations Building & Tower	No Adverse Effect
329	Ultra-High Frequency/ Very High Frequency Receiver Building	No Effect
442	Ordnance Handling Pad	No Adverse Effect
454	Ultra-High Frequency/ Very High Frequency Transmission Building	No Effect
511	Weapons Station	N/A
684	Ground Maintenance Storage	N/A
686	Parachute Repair Building	N/A
934	Moffett Field Golf Course Clubhouse	N/A
A1-I1	Housing & Garages	No Effect
MF1000	Runway 32L/ 14R	No Adverse Effect
MF1001	Instrument Runway 14L/ 32R	No Adverse Effect
MF1002	Aircraft Parking Aprons	No Adverse Effect (but adverse effect would result from the EAIP, which is a separate undertaking)
MF1003	High-Speed Aircraft Fueling Pits	N/A
MF1016	Parallel & Connecting Taxiways	No Adverse Effect

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Bldg. #	Bldg. Name	Effects
N/A	Moffett Field Golf Course	N/A
N/A	Naval Storage Depot	No Adverse Effect
N/A	Alviso Salt Pond Historic Landscape	No Adverse Effect
N/A	LMSD Campus	No Adverse Effect

7.0 Conclusion

The Undertaking involves the development of the FMF, located within the eastern portion of the NAS Sunnyvale Historic District. The project components include:

- Installation of new bus maintenance tents, an expanded trailer complex, bus washing facility, and bus parking upgrades for the Google bus fleet.
- Installation of new AOA compliant fencing around the project area and updates to accessible paths of travel for automobiles and pedestrians.
- Associated upgrades to site utilities.

The Undertaking will not cause an adverse effect on the expanded NAS Sunnyvale Historic District or on any contributing historic properties. Any adverse cumulative effects to the NAS Sunnyvale Historic District resulting from the separate proposed projects at the Eastside Airfield (EAIP and Hangar 3 demolition) will be addressed through the MOAs developed for those two separate undertakings .

To address any unanticipated discoveries of archaeological resources during construction and installation activities for the Undertaking, it is recommended that any ground disturbance is monitored by an archaeologist.

In conclusion, Stantec recommends a finding of No Adverse Effect to Historic Properties for the FMF project.

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Appendix A – Preliminary Site Layout

The following content was redacted from this public posting:

Appendix A: Preliminary Site Layout